

Appendix J–1
Original Detailed Cost Estimate

INTEROFFICE MEMORANDUM

Date: August 15, 2000

To: M. S. Kaptein MS 3953 526-31 15

From: T. R. Mitchell *TRM* MS 3655 526-3864

Subject: TANK FARM INTERIM ACTION PHASE 1 & 2

Per your request, Estimating Services has prepared the attached Title II Cost Estimate for the Tank Farm Interim Action Phase 1 & 2 Project. The Total Estimated Cost (TEC) for construction is **\$4,690,000**.

Included for your use is the **Cost** Estimate Summary and Detail sheets with the **cost** breakdowns. Also included **are** the Cost Estimate Recapitulation sheets describing the basis and assumptions used in **the** development of this estimate,

The Estimate is based on previously prepared estimate **2956-C**, along with updated versions of sheets C-25, and C-11 of the A-E Construction Plans and Specifications for the Tank Farm Interim Action Phase 1 & 2 Project. **Any** changes or revisions in the construction package should be reviewed by Estimating Services for impacts to the cost of the project.

If you **have any** questions or comments, please do not hesitate to contact me at **526-3864** or E-mail **ID MITCTR**.

Attachments

cc: Estimate File **2956-D**
T. R. Mitchell Letter Files (**TRM-13-00**)

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Project Number: **2956-D**

TEC Summary Report

<u>ESTIMATE ELEMENT</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>TOTAL</u>
		3.40%	13.94%	
Total Estimated Cost (TEC)	\$3,985,108	\$135,320	\$574,489	\$4,694,917
Total Estimated Cost (TEC)	\$3,985,108	\$135,320	\$574,489	\$4,694,917
Rounded TEC (Rounded to the nearest \$ 10000)				\$4,690,000

J-1-4

Type of Estimate: <u>TITLE II</u> Estimator: <u>HELL</u> Checked By: _____ Approved By: _____	Remarks
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Bechtel BWXT Idaho, LLC

COST ESTIMATE SUPPORT DATA RECAPITULATION

Project Title: **Tark** Farm Interim Action Phase 1 & 2
Estimator: T. R. Mitchell
Date: August **15,2000**
Estimate Type: Title II
File: **2956-D**
Approved By:

I. SCOPE OF WORK. *Brief description of the proposed project.*

The scope of work for this project is to control **INTEC** Tank Farm surface water infiltration. **This** will be accomplished by paving certain **areas** with asphalt, installing a Poly Urea spray on coating in other designated areas, and constructing a concrete ditch system for transporting water into an evaporation pond that will **be** constructed outside the Tank Fann area. The work includes installation of a lift station, piping, and an HDPE membrane liner for the evaporation pond.

II. BASIS OF THE ESTIMATE: *Drawings, Design Report, Engineers Notes and/or other documentation upon which the estimate is originated.*

This estimate is based on a previously prepared estimate **2956-C**, along with updated versions of sheets **C-25**, and C-11 of the A-E **Construction** Specifications and drawings for the OU3-13, Group 1, **Tark** Fann Interim Action Phase 1 & 2 Project.

III. ASSUMPTIONS: *Conditions statements accepted or supposed true without proof of demonstration. An assumption has a direct impact on total estimated cost.*

- A. This project will be awarded to a subcontractor through the competitive bidding process.
- B. Assume the Poly Urea spray on material will be sprayed to a thickness of **125** mil.
- C. Assume the geotextile fabric will be placed up to the edge of all buildings and penetrations.
- D. The spray on will be sprayed at least 1 foot up the penetration or building walls.
- E. Assume there will be seven hours of productivity per day for the work being done inside the **Tark** Farm Fence.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: Tank Farm Interim Action Phase 1 & 2
File: 2956-D

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- F. Assume all work within the Tank **Farm** will not be affected by the load restrictions in the area.
- G. Level C PPEs will need to be worn for work **being** done inside the **Tank Farm** Fence.
- H. Stockpiles for excavated soil will need to be maintained only for soil removed from inside the Tank Farm Fence.
- I. Assume 5% of the soil removed for the lift station will need to be boxed and hauled away.
- J. Assume boxes for contaminated soil will be a GFE item that will be issued at no cost to the project.

IV. CONTINGENCY GUIDELINE IMPLEMENTATION: *The contingency as determined by the contingency allowance guidelines can be altered to reflect the type of construction and conditions that may impact the total estimated cost*

A contingency analysis **has** been performed to assess project risks. The main **risk** that would effect the cost of this project is the application of the Poly Urea spray on coating, **and** due to the excavation and grading that will take place, **Tank Farm** area contaminated soil is another major risk to the project. These **tasks** cover a major portion **of** the cost of **this** project, therefore contingency **has** been calculated to be **14%**.

V. OTHER COMMENTS/CONCERNS SPECIFIC TO THE ESTIMATE

- A. This estimate includes the costs for training all of the anticipated workers. It is possible that some of the workers will already have been trained, and these costs could be reduced.
- B. **Costs** for procurement and BBWI G&A allowance have been identified in the detail sheets of the construction estimate.
- C. Costs for a full-time non-working supervisor have been included for a 20 week construction schedule.

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
Project Location: INTEC
Estimate Number: 2956-D

Project Summary Report

Client: M. S. KAPTEIN
Prepared By: T. R. MITCHELL
Estimate Type: TITLE II

LEVEL		Estimate Subtotal	Escalation	Contingency	Contingency %	TOTAL
9000	CONSTRUCTION	\$3,888,518	\$135,320	\$574,489	14.28%	\$4,598,327
9100	-CONSTRUCTION SUBCONTRACTS	\$3,888,518	\$135,320	\$574,489	14.28%	\$4,598,327
9101	---GENERAL CONDITIONS	\$192,690	\$6,706	\$23,927	12.00%	\$223,323
9101.1	-----GENERAL CONDITIONS	\$117,009	\$4,072	\$14,530	12.00%	\$135,610
9101.1.1	GENERAL CONDITIONS MECHANICAL	\$8,003	\$279	\$994	12.00%	\$9,275
9101.1.2	-----GENERAL CONDITIONS ELECTRICAL	\$7,238	\$252	\$899	12.00%	\$8,368
9101.1.3	-----GENERAL CONDITIONS - GENERAL CONTRACTOR	\$101,766	\$3,542	\$12,637	12.00%	\$117,947
9101.2	---GC .CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE	\$75,681	\$2,634	\$9,398	12.00%	\$87,713
9102	---SITEWORK	\$1,979,433	\$68,884	\$294,108	14.36%	\$2,342,425
9102.7	---DEMO FOR DITCHES	\$13,080	\$455	\$1,624	12.00%	\$15,160
9102.4	-----EXC. & FILL FOR DITCH STRUCTURES	\$514,134	\$17,692	\$106,405	20.00%	\$638,431
9102.8	-----SITEWORK FOR POLY UREA PREPARATION	\$228,659	\$7,957	\$35,492	15.00%	\$272,109
9102.5	-----INSTALL PIPES	\$103,374	\$3,597	\$12,837	12.00%	\$119,808
9102.6	-----ASPHALT REPAIR	\$9,447	\$329	\$1,173	12.00%	\$10,948
9102.3	-----POND LINERS	\$359,148	\$12,498	\$44,598	12.00%	\$416,244
9102.1	-----CHAIN LINK FENCING	\$61,951	\$2,158	\$6,411	10.00%	\$70,517
9102.2	-----REVEGETATION	\$3,329	\$116	\$344	10.00%	\$3,789
	-----ASPHALT PAVING OF TANK FARM PERIMETER AREAS	\$686,311	\$23,884	\$85,223	12.00%	\$795,418
9103	---CONCRETE	\$250,097	\$8,703	\$31,056	12.00%	\$289,856
9103.01	-----CONC. FOR DITCH STRUCTURES	\$207,937	\$7,238	\$25,821	12.00%	\$240,994
9103.02	-----PRECAST CONC FOR DITCHES	\$41,220	\$1,434	\$5,118	12.00%	\$47,773
9103.3	---CONCRETE PAD AT SPILLWAY	\$941	\$33	\$117	12.00%	\$1,090

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Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

Project Summary Report

Client **M. S. UAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL		Estimate Subtotal	Escalation	Contingency	Contingency %	TOTAL
9105	---METALS	\$2,358	\$82	\$293	12.00%	\$2,733
9105.01	-----MISC METALS	\$2,358	\$82	\$293	12.00%	\$2,733
9109	-FINISHES	\$1,395,396	\$48,560	\$216,593	15.00%	\$1,660,550
9109.1	-----POLY UREA SPRAY-ON COATING	\$1,395,396	\$48,560	\$216,593	15.00%	\$1,660,550
9115	--MECHANICAL	\$26,447	\$920	\$3,284	12.00%	\$30,652
9115.1	---*INSTALL PUMPS IN LIFT STATION	\$26,447	\$920	\$3,284	12.00%	\$30,652
9116	---ELECTRICAL	\$42,096	\$1,465	\$5,227	12.00%	\$48,788
9116.1	-----SWITCHGEAR and DEVICES	\$5,521	\$192	\$686	12.00%	\$6,399
9116.2	---RACEWAYS AND ENCLOSURES	\$6,473	\$225	\$804	12.00%	\$7,502
9116.3	-----CONDUCTORS AND GROUNDING	\$7,585	\$264	\$942	12.00%	\$8,791
9116.4	-----DUCT BANK	\$7,247	\$252	\$900	12.00%	\$8,399
9116.5	-----TESTING	\$611	\$21	\$76	12.00%	\$706
9116.6	---REPAIR CATHODIC PROTECTION	\$14,659	\$510	\$1,620	12.00%	\$16,969
GAPIF	Non-Org G&A and PIF	\$96,590	\$0	\$0	0.00%	\$96,590
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Total	TEC (TOTAL ESTIMATED COST)	53,985,108	\$135,320	\$574,489	13.94%	54,694,917

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Project Name: **TANK FARM INTERIM ACTION PHASE 1 & 2**
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. UAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9101.1.1 GENERAL MECHANICAL										
Supervision	PIPE	U.C. per HRS	1	CN-PIPF	42.95	0	0	0	0	42.95
		80.00	80	\$42.95	53,436	\$0	\$0	\$0	\$0	\$3,436
Training	PIPE	U.C. per Men	24	CN-PIPE	943.92	0	0	0	0	943.92
		2.00	48	\$39.33	\$1,888	\$0	\$0	\$0	\$0	\$1,888
Mobilization & Demobilization	PIPE	U.C. per Lot	8	CN-PIPE	314.64	0	0	0	0	314.64
		1.00	8	\$39.33	5315	\$0	\$0	\$0	\$0	\$315
Subtotal					\$5,638	\$0	\$0	\$0	\$0	\$5,638
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$2,364	\$0	\$0	\$0	\$0	\$2,364
Subtotal Estimate										\$8,003
Escalation					\$278	\$0	\$0	\$0	\$0	\$278
Contingency					\$994	\$0	\$0	\$0	\$0	\$994
---Total 9101.1.1 GENERAL CONDITIONS MECHANICAL			136		\$9,275	\$0	\$0	\$0	\$0	\$9,275
9101.1.2 GENERAL CONDITIONS ELECTRICAL										
Supervision	ELEC	U.C. per HRS	1	CN-ELCF	38.62	0	0	0	0	38.62
		80.00	80	\$38.62	\$3,090	\$0	\$0	\$0	\$0	\$3,090
Training	ELEC	U.C. per Men	24	CN-ELEC	861.36	0	0	0	0	861.36
		2.00	48	\$35.99	\$1,723	\$0	\$0	\$0	\$0	\$1,723
Mobilization & Demobilization	ELEC	U.C. per Lot	8	CN-ELEC	287.12	0	0	0	0	287.12
		1.00	8	\$35.89	\$287	\$0	\$0	\$0	\$0	\$287
Subtotal					\$5,099	\$0	\$0	\$0	\$0	\$5,099
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$2,138	\$0	\$0	\$0	\$0	\$2,138
Subtotal Estimate										\$7,238
Escalation					\$252	\$0	\$0	\$0	\$0	\$252
Contingency					\$899	\$0	\$0	\$0	\$0	\$899
---Total 9101.1.2 GENERAL CONDITIONS ELECTRICAL			136		\$8,388	\$0	\$0	\$0	\$0	\$8,388
9101.1.3 GENERAL CONDITIONS - GENERAL CONTRACTOR										
Supervision	GEN	U.C. per Wk	40	CN-SUPR	1600	0	0	0	0	1600
		20.00	800	\$40.00	\$32,000	\$0	\$0	\$0	\$0	\$32,000
Training Fw Tank Farm	GEN	U.C. per Men	24	CN-LABR	757.92	0	0	0	0	757.92
		8.00	192	\$31.58	\$6,063	\$0	\$0	\$0	\$0	\$6,063
Training For Remainder of Crew	GEN	U.C. per Men	8	CN-LABR	252.64	0	0	0	0	252.64
		7.00	58	\$31.56	\$1,768	\$0	\$0	\$0	\$0	\$1,768
Mobilization & Demobilization	GEN	U.C. per Lot	0	CN-LABR	0	0	0	0	20000	20000
		1.00	0		\$0	\$0	\$0	\$0	\$20,000	\$20,000

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
Project Location: INTEC
Estimate Number: 2956-D

CONSTRUCTION DETAIL ITEM REPORT

Client: M. S. KAPTEIN
Prepared By: T. R. MITCHELL
Estimate Type: TITLE #

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9101.1.3 GENERAL CONDITIONS - GENERAL CONTRACTOR										
	GEN	U.C. per Ea	20	CN-LABR	631.6	0	0	0	0	631.6
Misc. Outages		6.00	120	\$31.58	\$3,790	\$0	\$0	\$0	\$0	\$3,790
	GEN	U.C. per lot			0	0	0	19750	0	19750
Allowance for Hand Tools and Consumables at (3% of Labor)		1.00	0		\$0	\$0	\$0	\$19,750	\$0	\$19,750
Subtotal					\$43,621	\$0	\$0	\$19,750	\$20,000	\$83,371
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$12,663	\$0	\$0	\$5,733	\$0	\$18,397
Subtotal Estimate					\$1,959	\$0	\$0	\$887	\$696	\$101,768
Escalation					\$6,989	\$0	\$0	\$3,164	\$2,484	\$12,637
Contingency										
---Total 9101.1.3 GENERAL CONDITIONS- GENERAL CONTRACTOR			1,168		\$65,233	\$0	\$0	\$29,535	\$23,180	511,847
9101.2 GC - CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE										
	GEN	U.C. per Wk	20	CN-SUPR	800	0	0	0	0	800
Added Supervision		20.00	400	\$40.00	\$16,000	\$0	\$0	\$0	\$0	\$16,000
	GEN	U.C. per Men	4	CN-LABR	126.32	0	0	0	0	126.32
Additional Training		6.00	24	\$31.58	\$758	\$0	\$0	\$0	\$0	\$758
	GEN	U.C. per Hr	1	CN-LABR	31.58	0	0	0	0	31.58
Labor Impact - 10%		1,200.00	1,200	\$31.58	\$37,896	\$0	\$0	\$0	\$0	\$37,896
	GEN	U.C. per Hr	10	CN-SUPR	400	0	0	0	0	400
Post Job Review		10.00	100	\$40.00	\$4,000	\$0	\$0	\$0	\$0	\$4,000
Subtotal					\$58,654	\$0	\$0	\$0	\$0	\$58,654
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$17,027	\$0	\$0	\$0	\$0	\$17,027
Subtotal Estimate					\$2,634	\$0	\$0	\$0	\$0	\$75,681
Escalation					\$9,398	\$0	\$0	\$0	\$0	\$2,634
Contingency										\$9,398
---Total 9101.2 GC - CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE			1,724		\$87,713	\$0	\$0	\$0	\$0	\$87,713
9102.7 DEMO FOR DITCHES										
	CONC	U.C. per Hr	2	CN-LABR	63.16	0	0	0	0	63.16
Demo dry well near CPP-649 (labors)		20.00	40	\$31.58	\$1,263	\$0	\$0	\$0	\$0	\$1,263
	CONC	U.C. per Hr	1	CN-EQLT	33.91	30	0	0	0	63.91
Demo dry well near CPP-649 (hoe)		20.00	20	\$33.91	\$678	\$600	\$0	\$0	\$0	\$1,278
	CONC	U.C. per Hr	3	CN-LABR	94.74	0	0	0	0	94.74
Remove catch basin near CPP-649 (labors)		30.00	90	\$31.58	\$2,842	\$0	\$0	\$0	\$0	\$2,842

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION RETAIL ITEM REPORT

Client: **M.S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
-- 9102.7 DEMO FOR DITCHES										
	CONC	U.C. per hr	1	CN-EQLT	33.91	30	0	0	0	63.91
Remove catch basin near CPP-649 (hoe)		30.00	30	533.91	\$1,017	\$900	\$0	\$0	\$0	\$1,917
	CONC	U.C. per hr	2	CN-LABR	63.16	0	0	0	0	63.16
Remove 12' CMP near CPP-649 (labors)		10.00	20	\$31.58	\$632	\$0	\$0	\$0	\$0	\$632
	CONC	U.C. per hr	1	CN-EQLT	33.91	30	0	0	0	63.91
Remove 12' CMP near CPP-649 (hoe)		10.00	10	\$33.91	\$339	\$300	\$0	\$0	\$0	\$639
	CONC	U.C. per hr	1	CN-TRLT	32.42	32	0	0	0	64.42
Haul material to bulky waste		10.00	10	\$32.42	\$324	\$320	\$0	\$0	\$0	\$644
Subtotal					\$7,096	52,120	\$0	\$0	\$0	\$9,216
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					52,975	\$889	50	\$0	\$0	53,864
Subtotal Estimate										\$13,080
Escalation					\$350	\$105	\$0	\$0	\$0	\$455
Contingency					\$1,251	\$374	\$0	\$0	\$0	\$1,624
-- Total 9102.7 DEMO FOR DITCHES			220		\$11,672	\$3,487	\$0	\$0	\$0	\$15,160
-- 9102.4 EXC 6 FILL FOR DITCH STRUCTURES										
Memo: Unit prices were developed with another program and transferred to success.										
	GEN	U.C. per cy			18.75	14.9	0	0	0	33.65
Excavate for lift station		1,270.00	0		\$23,813	\$18,923	\$0	\$0	\$0	\$42,736
Memo: Inside Tank Farm										
	GEN	U.C. per cy			8.34	3.77	0	0	0	12.11
Backfill lift station		1,270.00	0		\$10,592	54,788	\$0	\$0	\$0	\$15,380
	GEN	U.C. per cy	8	CN-LABR	252.64	0	0	0	0	252.64
Boxing Contaminated Dirt from Lift Station (5% of total)		64.00	512	\$31.58	\$16,169	\$0	\$0	\$0	\$0	\$16,169
	GEN	U.C. per sf			0	0	0	0.1	0	0.1
Maintain Excavated Soil from Lift Station Area		20,000.00	0		\$0	\$0	\$0	\$2,000	\$0	\$2,000
	GEN	U.C. per cy			8.63	1.96	0	0	0	10.59
Excavation for ditches		1,170.00	0		\$10,097	\$2,293	\$0	\$0	\$0	\$12,390
	GEN	U.C. per cy			18.75	14.96	0	0	0	33.71
Excavation for pipes Inside Tank Farm Fence		2,100.00	0		\$39,375	\$31,416	\$0	\$0	\$0	\$70,791
	GEN	U.C. per cy			8.34	3.77	0	0	0	12.11
Backfill pipes inside Tank Farm Fence		2,100.00	0		\$17,514	\$7,917	\$0	\$0	\$0	\$25,431
	GEN	U.C. per cy			1.85	1.5	0	0	0	3.35
Excavation for 48' CMP Outside Tank Farm Fence		11,130.00	0		\$20,591	\$16,695	\$0	\$0	\$0	\$37,286
	GEN	U.C. per cy			4.46	1.82	0	0	0	6.28
Backfill 48' CMP Outside Tank Farm Fence		11,130.00	0		\$49,640	\$20,257	\$0	\$0	\$0	\$69,896

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Project Name: **TANK FARM INTERIM ACTION PHASE 1 & 2**
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Egg	Matl	S/C	Other	TOTAL
9102.4 EXC. & FILL FOR DITCH STRUCTURES										
Memo: Unit - GEN were developed with another program and transferred to success.										
	GEN	U.C. per Ea	40	CN-LABR	1263.2	0	0	0	0	1263.2
Hand Excavate under utility tunnel		1.00	40	\$31.58	\$1,263	\$0	\$0	\$0	\$0	\$1,263
	GEN	U.C. per Ea	20	CN-LABR	631.6	300	0	0	0	931.6
Temp supports for utilities		3.00	60	\$31.58	\$1,895	\$900	\$0	\$0	\$0	\$2,795
	GEN	U.C. per sf	210,600.00		0.009	0.006	0	0	0	0014
Clear and Grub for Pond Excavation					\$1,611	\$1,200	\$0	\$0	\$0	\$3,012
Memo: Outside Tank Farm Fence										
	GEN	U.C. per cy	52,000.00		0.69	1.12	0	0	0	1.81
Excavation for Evaporation Pond					\$35,880	\$58,240	\$0	\$0	\$0	\$94,120
	GEN	U.C. per cy	255.00		7.08	4.5	0	0	0	11.58
Excavate Small Trenches for HDPE Liner					\$1,805	\$1,148	\$0	\$0	\$0	\$2,953
	GEN	U.C. per Cy	255.00		1.72	1.05	0	0	0	2.78
Backfill & Compact Trenches for HDPE Liner					\$439	\$270	\$0	\$0	\$0	\$709
	GEN	U.C. per Ea	1.00		0	0	0	650	0	650
Telephone Pole for Staff Gauge					\$0	\$0	\$0	\$650	\$0	\$650
	GEN	U.C. per Ea	1.00		0	0	0	635	0	635
Staff Gauge					\$0	\$0	\$0	\$635	\$0	\$635
	GEN	U.C. per Cy	185.00		0.45	0.88	0	0	0	1.33
Excavate Drainage Ditch For Pond Overflow					\$83	\$163	\$0	\$0	\$0	\$246
Subtotal					\$230,966	\$164,210	\$0	\$53,285	\$0	\$398,461
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEELORG Labor/Subcontractor Overheads					\$67,049	\$47,670	\$0	\$954	\$0	\$115,673
Subtotal Estimate										\$514,134
Escalation					\$10,371	\$7,373	\$0	\$148	\$0	\$17,892
Contingency					\$81,677	\$43,651	\$0	\$877	\$0	\$106,405
Total 9102.4 EXC. & FILL FOR DITCH STRUCTURES			612		\$370,064	\$263,104	\$0	\$5,263	\$0	\$638,431
ITE . ORK FOR POLY UREA PREPARATION										
	GEN	U.C. per Ea	30	CN-IRON	1305	0	300	0	0	1605
Engineered Bridges at Duct Banks		5.00	150	\$43.50	\$8,525	\$0	\$1,500	\$0	\$0	\$8,025
Memo: Inside Tank Farm										
	GEN	U.C. per Ea	2	CN-IRON	67	0	0	0	0	87
Move Each Bridge 3 times		15.00	30	\$43.50	\$1,305	\$0	\$0	\$0	\$0	\$1,305
	GEN	U.C. per Ea	2	CN-IRON	87	0	0	0	0	67
Remove and Dispose of Bridges		5.00	10	\$43.50	\$435	\$0	\$0	\$0	\$0	\$435

Project Name:
TANK FARM INTERIM ACTION PHASE 1 62
Project Location: INTEC
Estimate Number: 2956-D

CONSTRUCTION DETAIL ITEM REPORT

Client: M. S. KAPTEIN
Prepared By: T. R. MITCHELL
Estimate Type: TITLE II

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
--- 9102.8 SITEWORK FOR POLY UREA PREPARATION										
	GEN	U.C. per SF	0.02	CN-LABR	0.632	0	0	0	0	0.632
Regrade Site w/Hand Labor and Equipment		180,000.00	3.600	\$31.58	\$113,688	\$0	\$0	\$0	\$0	\$113,688
Memo: Inside Restricted Load Area										
	GEN	U.C. per SF	0.01	CN-LABR	0.316	0	0	0	0	0.316
Regrade Site w/Equipment		170,000.00	1.700	\$31.58	\$53,686	\$0	\$0	\$0	\$0	\$53,686
Memo: Outside Restricted Load Area										
Subtotal					\$175,639	\$0	\$1,500	\$0	\$0	\$177,139
Sales Tax					\$0	\$0	\$75	\$0	\$0	\$75
INEEL ORG Labor/Subcontractor Overheads					\$50,988	\$0	\$457	\$0	\$0	\$51,445
Subtotal Estimate										
Escalation					\$7,867	\$0	\$71	\$0	\$0	\$7,938
Contingency					\$35,177	\$0	\$315	\$0	\$0	\$35,492
--- Total 9102.8 SITEWORK FOR POLY UREA PREPARATION			5,490		\$269,691	\$0	\$2,416	\$0	\$0	\$272,109
--- 9102.5 INSTALL PIPES										
	PIPE	U.C. per lf	0.25	CN-PIPE	9.632	0	4.65	0	0	14.482
4" Galvanized		45.00	11	\$39.33	\$442	\$0	\$209	\$0	\$0	\$652
	GEN	U.C. per lf	0.15	CN-LABR	4.737	0	2.45	0	0	7.187
8" WC		370.00	56	\$31.58	\$1,753	\$0	\$907	\$0	\$0	\$2,659
	GEN	U.C. per lf	0.2	CN-LABR	6.316	0	5.4	0	0	11.716
12" PVC		55.00	11	\$31.58	\$347	\$0	\$297	\$0	\$0	\$644
	GEN	U.C. per lf	0.2	CN-LABR	6.316	0	12.4	0	0	18.716
12" CMP		50.00	10	\$31.58	\$316	\$0	\$620	\$0	\$0	\$936
	GEN	U.C. per lf	0.24	CN-LABR	7.579	0	13.5	0	0	21.079
18" CMP		55.00	13	\$31.58	\$417	\$0	\$743	\$0	\$0	\$1,159
	GEN	U.C. per lf	0.32	CN-LABR	10.106	0	25.5	0	0	35.606
24" CMP		65.00	21	\$31.58	\$657	\$0	\$1,658	\$0	\$0	\$2,314
	GEN	U.C. per lf	0.42	CN-LABR	13.264	0	26.5	0	0	39.764
30" CMP		40.00	17	\$31.58	\$531	\$0	\$1,060	\$0	\$0	\$1,591
	GEN	U.C. per lf	0.45	CN-LABR	14.211	0	47	0	0	61.211
32" CMP		55.00	25	\$31.58	\$782	\$0	\$2,585	\$0	\$0	\$3,367
	GEN	U.C. per lf	0.45	CN-LABR	14.211	0	47	0	0	61.211
36" CMP		100.00	45	\$31.58	\$1,421	\$0	\$4,700	\$0	\$0	\$6,121
	GEN	U.C. per lf	0.5	CN-LABR	15.79	0	62.5	0	0	76.29
48" CMP		640.00	320	\$31.58	\$10,106	\$0	\$40,000	\$0	\$0	\$50,106

Project Name:
TANKFARM INTERIM ACTION PHASE 1 a 2
Project Location: INTEC
Estimate Number: 2956-D

CONSTRUCTION DETAIL ITEM REPORT

Client: M. S. KAPTEIN
Prepared By: T. R. MITCHELL
Estimate Type: TITLE II

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
--- 9102.5 INSTALL PIPES	GEN	U.C. per lf	035	CN-LABR	11 053	0	26	0	0	37.053
28x20" CMP		205.00	72	\$31.58	\$2,266	\$0	\$5,330	\$0	\$0	\$7,596
Subtotal					\$19,037	\$0	\$58,108	\$0	\$0	\$77,145
Sales Tax					\$0	\$0	\$2,905	\$0	\$0	\$2,905
INEEL ORG Labor/Subcontractor Overheads					\$5,583	\$0	\$17,740	\$0	\$0	\$23,324
Subtotal Estimate										\$103,374
Escalation					\$857	\$0	\$2,741	\$0	\$0	\$3,597
Contingency					\$3,057	\$0	\$9,779	\$0	\$0	\$12,837
---Total 9102.5 INSTALL PIPES			600		\$28,534	\$0	\$91,274	\$0	\$0	\$119,808
--- 9102.6 ASPHALT REPAIR	PAVE	U.C. per sf			2	1.5	1.5	0	0	5
Repair Asphalt roads		1,000.00	0		\$2,000	\$1,500	\$1,500	\$0	\$0	\$5,000
Cut asphalt for removal	PAVE	U.C. per lf	0.055	CN-EQMD	1.911	1.25	0	0	0	3.161
		500.00	28	\$34.75	\$956	\$625	\$0	\$0	\$0	\$1,581
Subtotal					\$2,956	\$2,125	\$1,500	\$0	\$0	\$6,581
Sales Tax					\$0	\$0	\$75	\$0	\$0	\$75
INEEL ORG Labor/Subcontractor Overheads					\$1,239	\$891	\$660	\$0	\$0	\$2,791
Subtotal Estimate										\$9,447
Escalation					\$146	\$105	\$78	\$0	\$0	\$329
Contingency					\$521	\$375	\$278	\$0	\$0	\$1,173
---Total 9102.6 ASPHALT REPAIR			28		\$4,862	\$3,496	\$2,591	\$0	\$0	\$10,948
--- F I N E R		U.C. per sf			0	0	0	1.59	0	1.59
HDPE Membrane Liner (60 mil) w/Geotextile Liner		155,930.00	0		\$0	\$0	\$0	\$247,929	\$0	\$247,929
LINER		U.C. per sf			0	0	0	1.59	0	1.59
HDPE Membrane Liner Overlap		11,400.00	0		\$0	\$0	\$0	\$18,126	\$0	\$18,126
LINER		U.C. per sf			0	0	0	1.38	0	1.38
HDPE Membrane sections 2'x2' ballast pads (20 mil)		12,300.00	0		\$0	\$0	\$0	\$16,974	\$0	\$16,974
LINER		U.C. per Ea			0	0	0	2	0	2
Concrete Bag Ballasts for Pond Liner		3,034.00	0		\$0	\$0	\$0	\$6,068	\$0	\$6,068
LINER		U.C. per Ea			0	0	0	500	0	500
HDPE Membrane Boot 2 Locations		2.0	0		\$0	\$0	\$0	\$1,000	\$0	\$1,000

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9102.3 POND LINERS									
	LINER	U.C. per ea		0	0	0	1500	0	1500
	HDPE Rung Ladder System	20.00	0	\$0	\$0	\$0	\$30,000	\$0	\$30,000
<hr/>									
	Subtotal			\$0	\$0	\$0	\$320.097	\$0	\$320.097
	Sales Tax			\$0	\$0	\$0	\$0	\$0	\$0
	INEELORG Labor/Subcontractor Overheads			\$0	\$0	\$0	\$39,052	\$0	\$39,052
<hr/>									
	Subtotal Estimate			\$0	\$0	\$0	\$12,498	\$0	\$359,148
	Escalation			\$0	\$0	\$0	\$44,598	\$0	\$12,498
	Contingency			\$0	\$0	\$0	\$44,598	\$0	\$44,598
<hr/>									
	Total 9102.3 POND LINERS		0	\$0	\$0	\$0	\$416,244	\$0	\$416,244
<hr/>									
HAIN LINK FENCING									
Memo: Outside Tank Farm									
	FENCE	U.C. per Ea	0.19	CN-LABR	6	3.08	0	0	9.06
	Auger Fence Post Holes	189.00	36	\$31.58	\$1,134	\$582	\$0	\$0	\$1,716
	FENCE	U.C. per Ea	0.492	CN-LABR	15.537	6.85	89	0	113.387
	Corner Posts 8' High	4.00	2	\$31.58	\$62	\$35	\$356	\$5	\$454
	FENCE	U.C. per Ea	0.525	CN-LABR	16.58	8.85	100	0	125.43
	End Gate Posts 8' High	2.00	1	\$31.58	\$33	\$18	\$21W	\$0	\$251
	FENCE	U.C. per Ea	0.464	CN-LABR	14.653	7.8	20.5	0	42.953
	Line Posts 8' High	183.00	85	\$31.58	\$2,682	\$1,427	\$3,752	\$0	\$7,860
	FENCE	U.C. per LF	0.026	CN-LABR	0.821	0.2	1.86	0	2.681
	Top Rail	1,880.00	49	\$31.58	\$1,544	\$376	\$3,497	\$0	\$5,416
	FENCE	U.C. per CF	0.105	CN-LABR	3.316	0.79	7	0	11.106
	Mesh Fabric 8' High	1,880.00	197	\$31.58	\$6,234	\$1,485	\$13,160	\$0	\$20,879
	FENCE	U.C. per LF	0.01	CN-LABR	0.316	0.08	0.1	0	0.496
	Reinforcing Tension Wire	1,880.00	19	\$31.58	\$594	\$150	\$188	\$0	\$932
	FENCE	U.C. per Ea	0.26	CN-LABR	6.211	0	18	0	26.211
	Fence Braces	10.00	3	\$31.58	\$82	\$0	\$180	\$0	\$262
	FENCE	U.C. per Ea	20	CN-LABR	631.6	250	750	0	1631.6
	Double-Swing Gate 24'	2.00	40	\$31.58	\$1,263	\$500	\$1,500	\$0	\$3,263

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL	
Grounding Wire	FENCE	U.C. per Lot	1.00	30 30	CN-LABR \$31.56	947.4 \$947	0 \$0	500 \$500	0 \$0	0 \$0	1447.4 \$1,447
Subtotal						\$14,575	\$4,574	\$23,332	\$0	\$0	\$42,481
Sales Tax						\$0	\$0	\$1,167	\$0	\$0	\$1,167
INEEL ORG Labor/Subcontractor Overheads						\$6,112	\$1,918	\$10,273	\$0	\$0	\$16,303
Subtotal Estimate											\$81,951
Escalation						\$720	\$226	\$1,210	\$0	\$0	\$2,156
Contingency						\$2,141	\$672	\$3,598	\$0	\$0	\$6,411
Total 9102.1 CHAIN LINK FENCING				462		\$23,547	\$7,390	\$39,580	\$0	\$0	\$70,517
9102.2 REVEGETATION											
Revegetate Area Around Outside Perimeter of Pond	GEN	U.C. per sf	4,200.00	0		0 \$0	0 \$0	0.3 \$1,260	0 \$0	0.3 \$1,260	
Revegetate Drainage Ditch	GEN	U.C. per sf	4,400.00	0		0 \$0	0 \$0	0.3 \$1,320	0 \$0	0.3 \$1,320	
Subtotal						\$0	\$0	\$0	\$2,580	\$0	\$2,580
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads						\$0	\$0	\$0	\$749	\$0	\$749
Subtotal Estimate											\$3,329
Escalation						\$0	\$0	\$0	\$116	\$0	\$116
Contingency						\$0	\$0	\$0	\$344	\$0	\$344
Total 9102.2 REVEGETATION				0		\$0	\$0	\$3,789	\$0	\$3,789	
ASPHALT PAVING OF TANK FARM PERIMETER AREAS											
Asphalt Paving of Tank Farm Perimeter	PAVE	U.C. per sf	95,280.00	0		2 \$190,560	1.5 \$142,920	1.5 \$142,920	0 \$0	0 \$0	5 \$476,400
Subtotal						\$190,560	\$142,920	\$142,920	\$0	\$0	\$476,400
Sales Tax						\$0	\$0	\$7,146	\$0	\$0	\$7,146
INEEL ORG Labor/Subcontractor Overheads						\$79,908	\$59,931	\$62,927	\$0	\$0	\$202,765
Subtotal Estimate											\$666,311
Escalation						\$9,412	\$7,059	\$7,412	\$0	\$0	\$23,884
Contingency						\$33,586	\$25,189	\$26,449	\$0	\$0	\$85,223
Total ASPHALT PAVING OF TANK FARM PERIMETER AREAS				0		\$313,465	\$235,089	\$246,854	\$0	\$0	\$795,418
01 CONC. FOR DITCH STRUCTURES											
Form, place, & finish ditch conc	GEN	U.C. per cy	520.00	3 1,560	CN-CUB \$31.58	94.74 \$49,265	0 \$0	100 \$52,000	0 \$0	0 \$0	194.74 \$101,265

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL	
Grounding Wire	FENCE	U.C. per Lot	1.00	30 30	CN-LABR \$31.56	947.4 \$947	0 \$0	500 \$500	0 \$0	0 \$0	1447.4 \$1,447
Subtotal						\$14,575	\$4,574	\$23,332	\$0	\$0	\$42,481
Sales Tax						\$0	\$0	\$1,167	\$0	\$0	\$1,167
INEEL ORG Labor/Subcontractor Overheads						\$6,112	\$1,918	\$10,273	\$0	\$0	\$16,303
Subtotal Estimate											\$81,951
Escalation						\$720	\$226	\$1,210	\$0	\$0	\$2,156
Contingency						\$2,141	\$672	\$3,598	\$0	\$0	\$6,411
Total 9102.1 CHAIN LINK FENCING				462		\$23,547	\$7,390	\$39,580	\$0	\$0	\$70,517
9102.2 REVEGETATION											
Revegetate Area Around Outside Perimeter of Pond	GEN	U.C. per sf	4,200.00	0		0 \$0	0 \$0	0.3 \$1,260	0 \$0	0.3 \$1,260	
Revegetate Drainage Ditch	GEN	U.C. per sf	4,400.00	0		0 \$0	0 \$0	0.3 \$1,320	0 \$0	0.3 \$1,320	
Subtotal						\$0	\$0	\$0	\$2,580	\$0	\$2,580
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads						\$0	\$0	\$0	\$749	\$0	\$749
Subtotal Estimate											\$3,329
Escalation						\$0	\$0	\$0	\$116	\$0	\$116
Contingency						\$0	\$0	\$0	\$344	\$0	\$344
Total 9102.2 REVEGETATION				0		\$0	\$0	\$3,789	\$0	\$3,789	
ASPHALT PAVING OF TANK FARM PERIMETER AREAS											
Asphalt Paving of Tank Farm Perimeter	PAVE	U.C. per sf	95,280.00	0		2 \$190,560	1.5 \$142,920	1.5 \$142,920	0 \$0	0 \$0	5 \$476,400
Subtotal						\$190,560	\$142,920	\$142,920	\$0	\$0	\$476,400
Sales Tax						\$0	\$0	\$7,146	\$0	\$0	\$7,146
INEEL ORG Labor/Subcontractor Overheads						\$79,908	\$59,931	\$62,927	\$0	\$0	\$202,765
Subtotal Estimate											\$666,311
Escalation						\$9,412	\$7,059	\$7,412	\$0	\$0	\$23,884
Contingency						\$33,586	\$25,189	\$26,449	\$0	\$0	\$85,223
Total ASPHALT PAVING OF TANK FARM PERIMETER AREAS				0		\$313,465	\$235,089	\$246,654	\$0	\$0	\$795,418
01 CONC. FOR DITCH STRUCTURES											
Form, place, & finish ditch conc	GEN	U.C. per cy	520.00	3 1,560	CN-CUB \$31.58	94.74 \$49,265	0 \$0	100 \$52,000	0 \$0	0 \$0	194.74 \$101,265

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
Project Location: INTEC
Estimate Number: 2956-D

CONSTRUCTION DETAIL ITEM REPORT

Client: M. S. KAPTEIN
Prepared By: T. R. MITCHELL
Estimate Type: TITLE#

LEVEL	DESCRIPTION	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
--- 9103.01 CONC. FOR DITCH STRUCTURES										
	Fine grade ditches	15,260.00	0.03 458	CN-CLAB \$31.58	0.947 \$14,457	0 \$0	0 \$0	0 \$0	0 \$0	0.947 \$14,457
	Form headwalls	2,990.00	0.25 748	CN-CARP \$35.81	8.953 \$26,768	0 \$0	1.5 \$4,485	0 \$0	0 \$0	10.453 \$31,253
	Place, finish, & cure headwall conc	45.00	4 180	CN-CLAB \$31.58	126.32 \$5,684	0 \$0	120 \$5,400	0 \$0	0 \$0	248.32 \$11,084
	Subtotal				\$96,174	\$0	\$61,885	\$0	\$0	\$158,059
	Sales Tax				\$0	\$0	\$3,094	\$0	\$0	\$3,094
	INEELORG Labor/Subcontractor Overheads				\$27,919	\$0	\$18,663	\$0	\$0	\$46,783
	Subtotal Estimate									\$207,937
	Escalation				\$4,318	\$0	\$2,918	\$0	\$0	\$7,236
	Contingency				\$15,409	\$0	\$10,411	\$0	\$0	\$25,821
--- Total 9103.01 CONC. FOR DITCH STRUCTURES			2,945		\$143,822	\$0	\$97,172	\$0	\$0	\$240,994
--- 9103.02 PRECAST CONC FOR DITCHES										
	Base for lift station	1.00	40 40	CN-LABR \$31.58	1263.2 \$1,263	0 \$0	4500 \$4,500	0 \$0	0 \$0	5763.2 \$5,763
	Cover for lift station	1.00	10 10	CN-LABR \$31.58	915.8 \$316	0 \$0	1500 \$1,500	0 \$0	0 \$0	1815.8 \$1,816
	Barrel section for lift station	15.00	4 60	CN-LABR \$31.58	126.32 \$1,895	0 \$0	350 \$5,250	0 \$0	0 \$0	476.32 \$7,145
	Crane usage for lift station	20.00	1 20	CN-EQHV \$35.49	35.49 \$710	150 \$3,000	0 \$0	0 \$0	0 \$0	185.49 \$3,710
	Precast manhole det1/c-28	1.00	35 35	CN-LABR \$31.58	1105.3 \$1,105	0 \$0	450 \$450	0 \$0	0 \$0	1555.3 \$1,555
	Precast manhole det1/c37	2.00	70 140	CN-LABR \$31.58	2210.6 \$4,421	0 \$0	660 \$1,320	0 \$0	0 \$0	2870.6 \$5,741
	Crane usage for manholes	30.00	1 30	CN-EQHV \$35.49	35.49 \$1,065	150 \$4,500	0 \$0	0 \$0	0 \$0	185.49 \$5,565
	Subtotal				\$10,775	\$7,500	\$13,020	\$0	\$0	\$31,295
	Sales Tax				\$0	\$0	\$651	\$0	\$0	\$651
	INEELORG Labor/Subcontractor Overheads				\$3,128	\$2,177	\$3,969	\$0	\$0	\$9,274
	Subtotal Estimate									\$41,220
	Escalation				5484	\$337	\$614	\$0	\$0	\$1,434
	Contingency				\$1,726	\$1,202	\$2,190	\$0	\$0	\$5,118
--- Total 9103.02 PRECAST CONC FOR DITCHES			335		\$16,113	\$11,216	\$20,444	\$0	\$0	\$47,773

ProjectName:
TANK FARU INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
0103.3 CONCRETE PAD AT SPILLWAY										
	GEN	U.C. per cy	3	CN-CUB	94.74	0	100	0	0	194.74
Form, Place, and Finish Concrete Pad		3.65	11	\$31.58	\$346	\$0	\$365	\$0	\$0	\$711
Subtotal					\$346	\$0	\$365	\$0	\$0	\$711
Sales Tax					\$0	\$0	\$18	\$0	\$0	\$18
INEEL ORG Labor/Subcontractor Overheads					\$100	\$0	\$111	\$0	\$0	\$212
Subtotal Estimate										\$941
Escalation					\$16	\$0	\$17	\$0	\$0	\$33
Contingency					\$55	\$0	\$61	\$0	\$0	\$117
---Total 0103.3 CONCRETE PAD AT SPILLWAY			11		\$517	\$0	\$573	\$0	\$0	\$1,090
0105.01 MISC METALS										
	GEN	U.C. per Ea	10	CN-IRON	435	0	1200	0	0	1635
Bilco access cover at lift station		1.00	10	\$43.50	\$435	\$0	\$1,200	\$0	\$0	\$1,635
	GEN	U.C. per Ea	0.25	CN-LABR	7.895	0	15	0	0	22.095
Delineator Post w/Reflector		2.00	1	\$31.58	\$16	\$0	\$30	\$0	\$0	\$46
	GEN	U.C. per Ea			0	0	0	50	0	50
Metal Band for HDPE Membrane Boot on 48' CMP		1.00	0		\$0	\$0	\$0	\$50	\$0	\$50
	GEN	U.C. per Ea			0	0	0	35	0	35
Metal Band for HDPE Membrane Boot on Telephone Pole		1.00	0		\$0	\$0	\$0	\$35	\$0	\$35
Subtotal					\$451	\$0	\$1,230	\$05	\$0	\$1,766
Sales Tax					\$0	\$0	\$62	\$0	\$0	\$62
INEEL ORG Labor/Subcontractor Overheads					\$131	\$0	\$375	\$25	\$0	\$530
Subtotal Estimate										\$2,358
Escalation					\$20	\$0	\$58	\$4	\$0	\$82
Contingency					\$72	\$0	\$207	\$14	\$0	\$293
---Total 0105.01 MISC METALS			11		\$674	\$0	\$1,931	\$127	\$0	\$2,733
0109.1 POLY UREA SPRAY-ON COATING										
	SPEC	U.C. per SF			0	0	0	6	0	6
Poly Urea Spray-On Including Geotextile Material and Installation		221,365.00	0		\$0	\$0	\$0	\$1,326,190	\$0	\$1,328,190

Project Name: TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: INTEC
 Estimate Number: 2956-D

CONSTRUCTION DETAIL ITEM REPORT

Client: M. S. KAPTEIN
 Prepared By: T. R. MITCHELL
 Estimate Type: TITLE II

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9109.1 POLY UREA SPRAY-ON COATING										
Subtotal					\$0	\$0	\$0	\$1,328,190	\$0	\$1,328,190
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEELORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$67,206	\$0	\$67,206
Subtotal Estimate										51,395,396
Escalation					\$0	\$0	\$0	\$48,560	\$0	\$48,560
Contingency					\$0	\$0	\$0	\$216,593	\$0	\$216,593
--- Total 9109.1 POLY UREA SPRAY-ON COATING			0		\$0	\$0	\$0	\$1,660,650	\$0	\$1,660,550
9115.1 INSTALL PUMPS IN LIFTSTATION										
Purchase & install pumps	PIPE	U.C. per Ea	30	CN-PIPE	11,799	0	5400	0	0	6579.9
			60	\$39.33	52,360	\$0	\$10,800	\$0	\$0	\$13,160
8' 90 Ell	PIPE	U.C. per Ea	0.6	CN-PIPE	23,598	0	200	0	0	223,598
			2	\$39.33	\$94	\$0	\$800	\$0	\$0	\$894
8' Red	PIPE	U.C. per Ea	0.6	CN-PIPE	23,598	0	160	0	0	183,598
			1	\$39.33	\$47	\$0	\$320	\$0	\$0	\$367
8' Chk Valve	PIPE	U.C. per Ea	2	CN-PIPE	78.66	0	1000	0	0	1078.66
			4	\$39.33	\$157	\$0	\$2,000	\$0	\$0	\$2,157
8' Adaptor	PIPE	U.C. per Ea	0.5	CN-PIPE	19,665	0	180	0	0	199,665
			1	\$39.33	\$39	\$0	\$360	\$0	\$0	\$399
8' Pipe	PIPE	U.C. per Lf	0.2	CN-PIPE	7,866	0	11	0	0	18,866
			2	\$39.33	\$79	\$0	\$110	\$0	\$0	\$189
Crane usage	PIPE	U.C. per Hr	1	CN-EQMD	34.75	40	0	0	0	74.75
			10	\$34.75	\$348	\$400	\$0	\$0	\$0	\$748
Subtotal					\$3,124	\$400	\$14,390	\$0	\$0	\$17,914
Sales Tax					\$0	\$0	\$720	\$0	\$0	\$720
INEELORG Labor/Subcontractor Overheads					\$1,310	\$168	\$6,336	\$0	\$0	\$7,814
Subtotal Estimate										\$26,447
Escalation					\$154	\$20	\$746	\$0	\$0	\$920
Contingency					\$551	\$70	\$2,663	\$0	\$0	\$3,284
--- Total 9115.1 INSTALL PUMPS IN LIFTSTATION			81		\$5,139	\$658	\$24,855	\$0	\$0	\$30,652
9116.1 SWITCHGEAR and DEVICES										
Demo existing MCP in MCC-OGF-1049	ELEC	U.C. per Ea	1	CN-ELEC	35.89	0	0	0	0	35.89
			1	\$35.89	\$36	\$0	\$0	\$0	\$0	\$36
New 30 amp breaker	ELEC	U.C. per Ea	1.5	CN-ELEC	53,835	0	275	0	0	328,835
			2	\$35.89	\$54	\$0	\$275	\$0	\$0	\$329
Nameplate	ELEC	U.C. per Ea	0.5	CN-KEC	17,945	0	25	0	0	42,945
			1	\$35.89	\$18	\$0	\$25	\$0	\$0	\$43

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eq	Matl	SIC	Other	TOTAL
--- 9116.1 SWITCHGEAR and DEVICES										
	ELEC	U.C. per Ea	3	CN-ELEC	107.67	0	540	0	0	647.67
	Manual transfer switch, Sq. D 82343RB	1.00	3	\$35.89	\$108	\$0	\$540	\$0	\$0	\$648
	ELEC	U.C. per Ea	4	CN-ELEC	143.56	0	0	0	0	143.56
	Control Panel, CP-OGF-1572, furnishes with pumps	1.00	4	\$35.89	\$144	\$0	\$0	\$0	\$0	\$144
	ELEC	U.C. per LF	0.1	CN-ELEC	3.569	0	3.25	0	0	6.839
	P-1000 U-Strut	50.00	5	\$35.89	\$179	\$0	\$163	\$0	\$0	\$342
	ELEC	U.C. per EA	0.3	CN-ELEC	10.767	0	45	0	0	152.67
	P-2453 Post Base	4.00	1	\$35.89	\$43	\$0	\$18	\$0	\$0	\$61
	ELEC	U.C. per Ea	0.1	CN-ELEC	3.569	0	18	0	0	5.389
	P-1325 Angle Fittings	12.00	1	\$35.89	\$43	\$0	\$22	\$0	\$0	\$65
	ELEC	U.C. per LS	10	CN-ELEC	358.9	0	30	0	0	388.9
	Misc. bolts and nuts	1.00	10	\$35.89	\$359	\$0	\$30	\$0	\$0	\$389
	ELEC	U.C. per Ea	0.5	CN-ELEC	17.945	0	3.5	0	0	21.445
	3/8" Concrete anchors	8.00	4	\$35.89	\$144	\$0	\$28	\$0	\$0	\$172
	ELEC	U.C. per EA	0	CN-ELEC	0	0	0	750	0	750
	4'x6" x 3'6" x 6" Concrete pad	1.00	0		\$0	\$0	\$0	\$750	\$0	\$750
	ELEC	U.C. per Ea	1.5	CN-ELEC	53.835	0	313	0	0	366.835
	Crouse Hinds AREA 10425 recpt	2.00	3	\$35.89	\$108	\$0	\$626	\$0	\$0	\$734
	ELEC	U.C. per Ea	1	CN-ELEC	35.89	0	10	0	0	45.89
	Ultrasonic Level Controller, furnished with pumps, connect only	2.00	2	\$35.89	\$72	\$0	\$20	\$0	\$0	\$92
Subtotal					\$1,306	\$0	\$1,746	\$750	\$0	\$3,802
Sales Tax					\$0	\$0	\$87	\$0	\$0	\$87
INEEL ORG Labor/Subcontractor Overheads					\$548	\$0	\$769	\$314	\$0	\$1,631
Subtotal Estimate					\$65	\$0	\$91	\$37	\$0	\$5,521
Escalation					\$230	\$0	\$323	\$132	\$0	\$192
Contingency										\$686
---Total 9116.1 SWITCHGEAR and DEVICES			36		\$2,149	\$0	53,016	\$1,234	\$0	\$6,399
--- 9116.2 RACEWAYS AND ENCLOSURES										
	ELEC	U.C. per LF	0.12	CN-ELEC	4.307	0	2.79	0	0	7.097
	1" GRC with fittings and supports	450.00	54	\$35.89	\$1,938	\$0	\$1,256	\$0	\$0	\$3,194
	ELEC	U.C. per Ea	0.2	CN-ELEC	7.178	0	2.5	0	0	9.678
	1" x 6" nipple with LN and Bushings	2.00	0	\$35.89	\$14	\$0	\$5	\$0	\$0	\$19
	ELEC	U.C. per Ea	0.3	CN-ELEC	10.767	0	6.5	0	0	17.267
	PB-167 and 189	2.00	1	\$35.89	\$22	\$0	\$13	\$0	\$0	\$35

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Ora/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9116.2 RACEWAYS AND ENCLOSURES										
	ELEC	U.C. per Ea	0.4	CN-ELEC	14.356	0	30	0	0	44.356
Appleton EJB-464 J-box		2.00	1	535.89	\$29	\$0	\$60	\$0	\$0	\$89
	ELEC	U.C. per Ea	0.5	CN-ELEC	17.945	0	95	0	0	27.445
LR 3/4" with gasket and cover		2.00	1	\$35.89	\$36	\$0	519	\$0	\$0	\$55
	ELEC	U.C. per Ea	0.5	CN-ELEC	17.945	0	25	0	0	42.945
3/4" sealite llex. 3' with connectors		2.00	1	\$35.89	\$36	\$0	\$50	\$0	\$0	\$86
	ELEC	U.C. per LF	0.06	CN-ELEC	2.153	0	0.35	0	0	2.503
1' PVC conduit		350.00	21	\$35.89	\$754	\$0	\$123	\$0	\$0	\$876
	ELEC	U.C. per EA	0.1	CN-ELEC	3.589	0	1.75	0	0	5.339
1' PVC FA		4.00	0	\$35.89	\$14	\$0	57	\$0	bo	\$21
	ELEC	U.C. per EA	0.1	CN-ELEC	3.589	0	25	0	0	6.089
1' 90 deg. GRC ell		4.00	0	535.89	\$14	\$0	\$10	\$0	\$0	\$24
	ELEC	U.C. per EA	0.01	CN-ELEC	0.359	0	1	0	0	1.359
1" Base spacer		60.00	1	\$35.89	\$22	\$0	\$60	\$0	\$0	582
Subtotal					\$2,878	\$0	\$1,602	\$0	\$0	\$4,480
Sales Tax					\$0	\$0	\$80	\$0	\$0	\$80
INEELORG Labor/Subcontractor Overheads					\$1,207	\$0	\$705	\$0	\$0	\$1,912
Subtotal Estimate										\$6,473
Escalation					\$142	bo	583	\$0	\$0	\$225
Contingency					\$507	\$0	\$296	\$0	\$0	\$804
---Total 9116.2 RACEWAYS AND ENCLOSURES			80		\$4,735	\$0	\$2,767	\$0	\$0	\$7,502
9116.3 CONDUCTORS AND GROUNDING										
	ELEC	U.C. per LF	0.006	CN-ELEC	0.287	0	0.08	0	0	0.367
#14 thhn copper wire		1,000.00	8	\$35.89	\$287	\$0	\$80	\$0	\$0	\$367
	ELEC	U.C. per LF	0.01	CN-ELEC	0.359	0	0.2	0	0	0.559
RG-6U2 Cable		450.00	5	\$35.89	\$162	\$0	\$90	\$0	\$0	\$252
	ELEC	U.C. per LF	0.01	CN-ELEC	0.359	0	1.1	0	0	1.459
#8 thhn copper wire		1,500.00	15	\$35.89	\$538	\$0	\$1,650	\$0	\$0	\$2,188
	ELEC	U.C. per LF	0.02	CN-ELEC	0.718	0	1	0	0	1.718
#2 bare copper		30.00	1	\$35.89	\$22	\$0	\$30	\$0	\$0	\$52
	ELEC	U.C. per Ea	10	CN-ELEC	358.9	0	25	0	0	383.9
5/8" x 10 groundrod		2.00	20	\$35.89	\$718	\$0	\$50	50	\$0	\$768
	ELEC	U.C. per Ea	1	CN-ELEC	35.69	0	20	0	0	55.89
Cadwelds		2.00	2	\$35.89	\$72	\$0	\$40	\$0	bo	\$112

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Success Estimating and C Management System

Page No. (

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE II**

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eqp	Matl	S/C	Other	TOTAL
9116.3 CONDUCTORS AND GROUNDING										
	ELEC	U.C. per Ea	20	CN-ELEC	717.8	0	35	0	0	752.8
Connect 7.5 HP Pumps		2.00	40	\$35.89	\$1,436	\$0	\$70	\$0	\$0	\$1,506
Subtotal					\$3,234	\$0	\$2,010	\$0	\$0	\$5,244
Sales Tax					\$0	\$0	\$101	\$0	\$0	\$101
INEELORG Labor/Subcontractor Overheads					\$1,356	\$0	\$885	\$0	\$0	\$2,241
Subtotal Estimate										\$7,585
Escalation					\$160	\$0	\$104	\$0	\$0	\$264
Contingency					\$570	\$0	\$372	\$0	\$0	\$942
Total 9116.3 CONDUCTORS AND GROUNDING			90		\$5,319	\$0	53.472	\$0	\$0	\$8,791
9116.4 DUCTBANK										
	ELEC	U.C. per CY			0	0	0	15	0	15
Excavation		40.00	0		\$0	\$0	\$0	\$600	\$0	\$600
	ELEC	U.C. per CY			0	0	0	20	0	20
Backfill		30.00	0		\$0	\$0	\$0	\$600	\$0	\$600
	ELEC	U.C. per CY			0	0	0	6	0	6
Haul		10.00	0		\$0	\$0	\$0	\$60	\$0	\$60
	ELEC	U.C. per SF			0	0	0	4.5	0	4.5
Formwork		350.00	0		\$0	\$0	\$0	\$1,575	\$0	\$1,575
	ELEC	U.C. per LBS			0	0	0	0.75	0	0.75
#4 rebar		500.00	0		\$0	\$0	\$0	\$375	\$0	\$375
	ELEC	U.C. per CY			0	0	0	125	0	125
Red concrete		10.00	0		\$0	\$0	\$0	\$1,250	\$0	\$1,250
	ELEC	U.C. per CY			0	0	0	20	0	20
Backfill		30.00	0		\$0	\$0	\$0	\$600	\$0	\$600
	ELEC	U.C. per LF	0.002	CN-ELEC	0.072	0	0.15	0	0	0.222
Locator Ribbon		200.00	0	\$35.89	\$14	\$0	\$30	\$0	\$0	\$44
Subtotal					\$14	\$0	\$30	\$5,060	\$0	\$5,104
Sales Tax					\$0	\$0	\$2	\$0	\$0	\$2
INEELORG Labor/Subcontractor Overheads					\$6	\$0	\$13	\$2,122	\$0	\$2,141
Subtotal Estimate										\$7,247
Escalation					\$1	\$0	\$2	\$250	\$0	\$252
Contingency					\$3	\$0	\$6	\$892	\$0	\$900
Total 9116.4 DUCTBANK			0		\$24	\$0	\$52	\$8,324	\$0	\$8,399
9116.5 TESTING										
	ELEC	U.C. per LOT	12	CN-ELEC	430.68	0	0	0	0	430.68
CC testing of systems		1.00	12	\$35.89	\$431	\$0	\$0	\$0	\$0	\$431

Project Name:
TANK FARM INTERIM ACTION PHASE 1 & 2
Project Location: INTEC
Estimate Number: 2956-D

CONSTRUCTION DETAIL ITEM REPORT

Client: M. S. KAPTEIN
Prepared By: T. R. MITCHELL
Estimate Type: TITLE#

LEVEL	Org/Subcontractor	QTY	Hrs	Crew/Rate	Labor	Const Eq	Matl	S/C	Other	TOTAL
9116.5 TESTING										
Subtotal					\$431	\$0	\$0	\$0	\$0	\$431
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$181	\$0	\$0	\$0	\$0	\$181
Subtotal Estimate										\$611
Escalation					\$21	\$0	\$0	\$0	\$0	\$21
Contingency					\$76	\$0	\$0	\$0	\$0	\$76
---Total 9116.5 TESTING			12		\$708	\$0	\$0	\$0	\$0	\$708
8116.6 REPAIR CATHODIC PROTECTION										
Memo: <i>Use one break per 100 lf of excavation and two splices per break.</i>										
	ELEC		4	CN-ELEC	143.56	0	60	0	0	203.56
Repair cathodic protection wires		50.00	200	\$35.89	\$7,178	\$0	\$3,000	\$0	\$0	\$10,178
Subtotal					\$7,178	\$0	\$3,000	\$0	\$0	\$10,178
Sales Tax					\$0	\$0	\$150	\$0	\$0	\$150
INEEL ORG Labor/Subcontractor Overheads					\$3,010	\$0	\$1,321	\$0	\$0	\$4,331
Subtotal Estimate										\$14,659
Escalation					\$355	\$0	\$156	\$0	\$0	\$510
Contingency					\$1,265	\$0	\$555	\$0	\$0	\$1,820
---Total 8116.6 REPAIR CATHODIC PROTECTION			200		\$11,808	\$0	\$5,182	\$0	\$0	\$16,989
G&A and PIF										
Memo: <i>This is a model that works with the macro named "INEELRollup_Rev0.BAS".</i>										
PF	NOG&A				0	0	0	0	1	1
Procurement Fee %		69,993.00	0		\$0	\$0	\$0	\$0	\$69,993	\$69,993
GBA	NOG&A				0	0	0	0	1	1
G&A Fee %		26,597.00	0		\$0	\$0	\$0	\$0	\$26,597	\$26,597
Subtotal					\$0	\$0	\$0	\$0	\$96,590	\$96,590
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEL ORG Labor/Subcontractor Overheads					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$96,590
Escalation					\$0	\$0	\$0	\$0	\$0	\$0
Contingency					\$0	\$0	\$0	\$0	\$0	\$0
---Total G&A and PIF			0		\$0	\$0	\$0	\$0	\$96,590	\$96,590

J-1-24

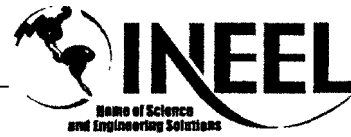
Project Name:
TANKFARM INTERIM ACTION PHASE 1 & 2
 Project Location: **INTEC**
 Estimate Number: **2956-D**

CONSTRUCTION DETAIL ITEM REPORT

Client: **M. S. KAPTEIN**
 Prepared By: **T. R. MITCHELL**
 Estimate Type: **TITLE It**

<u>LEVEL</u>	<u>Org/Subcontractor</u>	<u>QTY</u>	<u>Hrs</u>	<u>Crew/Rate</u>	<u>Labor</u>	<u>Const</u>	<u>Mail</u>	<u>S/C</u>	<u>Other</u>	<u>TOTAL</u>
Subtotal	TANK FARM INTERIM ACTION PHASE 1 & 2				\$879,753	\$323,849	\$326,638	\$1,679,797	\$116,590	\$3,326,627
Sales Tax					\$0	\$0	\$16,332	\$0	\$0	\$16,332
INEEL ORG Labor/Subcontractor Overheads					\$286,944	\$113,644	\$125,406	\$116,155	\$0	\$642,149
Subtotal Estimate										\$3,985,108
Escalation					\$40,601	\$15,225	\$16,299	\$62,499	\$696	\$135,320
Contingency					\$176,154	\$71,732	\$57,505	\$266,615	\$2,484	\$574,489
Total	TANK FARM INTERIM ACTION PHASE 1 & 2		14,377		\$1,383,452	\$524,450	\$542,180	\$2,125,066	\$119,770	\$4,694,917

Appendix J-2
Revised Phase I Detailed Cost Estimate



INTEROFFICE MEMORANDUM

Date: April 16, 2003

To: N. K. Rogers MS 3650 6-7775

From: J. C. Grenz MS 3655 6-7175

Subject: **TANK FARM INTERIM ACTION PHASE 1**

Estimating Services has prepared a Title II Estimate for **the** above project. The costs reflect what a subcontractor would be expected to bid on this project. The 10% contingency will be removed after the final bid documents are reviewed. At that time the estimate will be re-labeled as AFC.

Total Construction Subcontract Cost. -\$982,005

If you have **any** questions or comments, please call me at **526-7175** or e-mail me at grenjc.

cc: J. J. Aucoin, MS 3930
Estimate File 2960-A
J. C. Grenz Letter File (JCG-12-03)

Uniform File Code: 8000

Disposition Authority: A16-1.5-b

Retention Schedule: Cut off at the end of each fiscal year. Destroy **15** years after cutoff.

NOTE Original disposition authority, retention schedule, and Uniform Filing Code applied by the sender may not be appropriate for all recipients. Make adjustments as needed.

COST ESTIMATE SUPPORT DATA RECAPITULATION

Project Title: TANK FARM INTERIM ACTION PHASE I
Estimator: J. C. Grenz
Date: April 16, 2003
Estimate Type: Title II
File: 2960-A
Approved By:

- I. **PURPOSE:** *Brief description of the intent of how the estimate is to be used, i.e., for engineering study, comparative analysis, DWP, LCB out-year planning, BCP, etc.*

This estimate is to be used for AFC bid comparison after it is updated by the final bid documents.

- II. **SCOPE OF WORK** *Brief description of the proposed project.*

- A. The scope of this project is to encourage run-off away from the tank farm and into a large evaporation pond on the east side of MTEC. The following work is included.
- B. Complete the drainage ditches that were started several years ago.
- C. Line the evaporation pond.
- D. Pave the area around the big stack foundation on Olive Street.
- E. Rebuild a duct bank north of the tank farm so a new ditch will drain.

The following work is excluded

- A. All work inside the tank farm fence.
- B. Paving the berm around the fuel tanks north of the tank farm.

- III. **BASIS OF THE ESTIMATE:** *Drawings, Design Report, Engineers Notes and/or other documentation upon which the estimate is originated*

- A. Conversations with designers
- B. AFC drawings
- C. AFC specifications
- D. Cat Handbook
- E. Terex Handbook
- F. Means Estimating Manual
- G. Richardson Construction Estimating Standards
- H. Estimators experience at the INEEL

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: TANK FARM INTERIM ACTION PHASE 1
File: 2960-A

Page 2 of 2

IV. **ASSUMPTIONS:** *Conditions statements accepted or supposed true without proof & demonstration. An assumption has a direct impact on total estimated cost.*

- A. Construction to start early this summer.
- B. Construction to be completed by early fall of 2003.
- C. Work to be competitively bid by contractors familiar with the INEEL.
- D. Work to be performed during normal working hours.
- E. Work to be completed on a single shift basis.
- F. Overtime will be kept to a minimum.
- G. Hazardous material will not be encountered.
- H. All excavated material will be returned as backfill.
- I. Rad technicians, environmental, safety, and quality support will be available to support the work.
- J. No costs have been included to decon, clean, or replace any equipment.
- K. See detailed estimate for all items included in this estimate.

V. **CONTINGENCY GUIDELINE IMPLEMENTATION** *The percentage used for contingency as determined by the contingency allowance guidelines can be altered to reflect the type of construction and conditions that may impact the total estimated cost.*

A 10% contingency has been included by the estimator. It will be removed when the final AFC documents are reviewed.

VI. **OTHER COMMENTS/CONCERNS SPECIFIC TO THE ESTIMATE:**

Line item costs on the detailed cost sheets are direct costs without overhead, profit, escalation, or contingency. Those costs are added in at a subtotal level.

Project Summary Report

Project Name: *Tank Farm Interim Action*
Phase II Construction
 Project Location: *INTEC*
 Estimate Number: *2960-B*

Client: *J. C. Hurst*
 Prepared By: *J. C. Grenz*
 Estimate Type: *Planning*

<u>Level</u>	<u>Group</u>	<u>Description</u>	<u>Estimate</u> <u>Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
1000		CONSTRUCTIONMANAGEMENT	\$180,187	\$0	\$36,037	20.00%	\$216,224
1100		--CONSTRUCTION SUPERVISION & ENGINEERING	\$180,187	\$0	\$36,037	20.00%	\$216,224
5000		PROJECT MANAGEMENT	\$57,912	\$0	\$8,687	15.00%	\$66,599
5100		— P ADMINISTRATION	\$57,912	\$0	\$8,687	15.00%	\$66,599
9000		CONSTRUCTION	\$205,305	\$0	\$41,061	20.00%	\$246,366
9100		--CONSTRUCTIONSUBCONTRACTS	\$179,332	\$0	\$35,866	20.00%	\$215,198
9101		----GENERAL CONDITIONS	\$56,598	\$0	511,320	20.00%	\$67,917
9102		----SITEWORK	\$122,734	\$0	\$24,547	20.00%	\$147,281
9102.01		-----Grade Surface for Pavement	\$39,966	\$0	\$7,993	20.00%	\$47,960
9102.02		-----Pave Over Tanks	\$17,247	\$0	\$3,449	20.00%	\$20,696
9102.03		-----Pave on Slope	\$5,457	\$0	\$1,091	20.00%	\$6,548
9102.04		-----Excavate for Pipe	\$53,288	\$0	\$10,658	20.00%	\$63,946
9102.05		-----Install Pipes	\$6,175	\$0	\$1,355	20.00%	\$8,131
9300		— CONSTRUCTIONSUPPORT	\$17,149	\$0	\$3,430	20.00%	\$20,579
9310		—CONSTRUCTIONSUPPORT • RADTECH	\$17,149	\$0	\$3,430	20.00%	\$20,579
9400		--CONSTRUCTIONQUALITY CONTROL	\$8,824	\$0	\$1,765	20.00%	\$10,589
Total Tank Farm Phase II			\$443,404	\$0	\$85,785	19.35%	\$529,189

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Estimate/ vices Department

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Project Summary Report

Project Name: Tank Farm Interim Action Phase 1
Project Location: INTEC
Estimate Number: 2960-A

Client: N. K. Rogers
Prepared By: J. C. Grenz
Estimate Type: Title II

<u>Level</u>	<u>Group</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
Total	TF Phase I		\$892,732	\$0	\$89,273	10.00%	\$982,005

INEEL

DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action Phase 1**Client: **N. K. Rogers**Project Location: **INTEC**Prepared By: **J. C. Grenz**Estimate Number: **2960-A**Estimate Type: **Title II**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9101 GENERAL CONDITIONS											
	WORKABILITY WALKDOWN - 1/2 HR/DAY X 6 WORKERS X 4	GEN	20.00	12 240	CN-LABR \$31.58	378.96 \$7,579	0 \$0	0 \$0	0 \$0	0 \$0	378.96 \$7,579
	POST JOB REVIEW	GEN	1.00	10 10	CN-SUPR \$40.00	400 \$400	0 \$0	0 \$0	0 \$0	0 \$0	400 \$400
	Full-time Super	GEN	20.00	40 800	CKSUPR \$40.00	1600 \$32,000	0 \$0	0 \$0	0 \$0	0 \$0	1600 \$32,000
Subtotal						\$39,979	\$0	\$0	\$0	\$0	\$39,979
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads						\$11,606	\$0	\$0	\$0	\$0	\$11,606
Subtotal Estimate											\$51,585
Escalation						\$0	\$0	\$0	\$0	\$0	\$0
Contingency						\$5,159	\$0	\$0	\$0	\$0	\$5,159
---Total 9101 GENERAL CONDITIONS				1,050		\$56,744	\$0	\$0	\$0	\$0	\$56,744
9102.01 Demo											
	Demo Sidewalk	GEN	450.00	0.01 6	CN-EQMD \$34.75	0.348 \$156	0.8 \$360	0 \$0	0 \$0	0 \$0	1.148 \$516
	Demo Ductbank	GEN	85.00	1 85	CN-EQMD \$34.75	34.75 \$2,954	20 \$1,700	0 \$0	0 \$0	0 \$0	54.75 \$4,654
	Remove 4/0 15kV power	ELEC	1,800.00	0.048 86	CN-ELEC \$35.89	1,723 \$3,101	0 \$0	0 \$0	0 \$0	0 \$0	1,723 \$3,101
	1/0 Ground	ELEC	600.00	0.024 14	CN-ELEC \$35.89	0.861 \$517	0 \$0	0 \$0	0 \$0	0 \$0	0.861 \$517
	Confined space entry	ELEC	6.00	4 24	CN-ELEC \$35.89	143.56 \$861	0 \$0	0 \$0	0 \$0	0 \$0	143.56 \$661
Subtotal						\$7,589	\$2,060	\$0	\$0	\$0	\$9,649
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads						\$2,781	\$598	\$0	\$0	\$0	\$3,379
Subtotal Estimate											\$13,028
Escalation						\$0	\$0	\$0	\$0	\$0	\$0
Contingency						\$1,037	\$266	\$0	\$0	\$0	\$1,303
---Total 9102.01 Demo				214		\$11,407	\$2,924	\$0	\$0	\$0	\$14,331
9102.02 Grade for Ditches											
	Ditch Ex (225cy)		1.00	0		0 \$0	0 \$0	0.01 \$0	0 \$0	0 \$0	0.01 \$0

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Estimating Services Department

Material Costs where applicable Include Idaho State Sales Tax

Page No.

DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action Phase 1**Client: **N. K. Rogers**Project Location: **INTEC**Prepared By: **J. C. Grenz**Estimate Number: **2960-A**Estimate Type: **Title II**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9102.02	Grade for Ditches										
	Case 590 Loader/Hoe	DIRT	U.C. per hr	1	00E0930	0	28.68	0	0	0	28.68
			40.00	40		\$0	\$1,147	\$0	\$0	\$0	\$1,147
	Equipment Operators, Medium Equipment	DIRT	U.C. per hr	1	CN-EQMD	94.75	0	0	0	0	94.75
			40.00	40	\$34.75	\$1,390	\$0	\$0	\$0	\$0	\$1,390
	LABORER EXCAVATION, BACKFILL, FOUNDATIONS, TRENCHES	DIRT	U.C. per hr	3	CN-LABE	97.32	0	0	0	0	97.32
			40.00	120	\$32.44	\$3,893	\$0	\$0	\$0	\$0	\$3,893
	12 cy End Dump	DIRT	U.C. per hr	1	00E2010	0	31.45	0	0	0	31.45
			40.00	40		\$0	\$1,258	\$0	\$0	\$0	\$1,258
	Truck Drivers, Heavy	DIRT	U.C. per hr	1	CN-TRHV	33.48	0	0	0	0	33.48
			40.00	40	\$33.48	11,339	\$0	\$0	\$0	\$0	\$11,339
Subtotal						\$6,622	\$2,405	\$0	\$0	\$0	\$9,027
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads						\$2,777	\$1,009	\$0	\$0	\$0	\$3,785
Subtotal Estimate											\$12,813
Escalation						\$0	\$0	\$0	\$0	\$0	\$0
Contingency						\$940	\$341	\$0	\$0	\$0	\$1,281
--Total 8102.02 Grade for Oitchea				200		\$10,339	\$3,755	\$0	\$0	\$0	\$14,094
9102.03	Install GFE Manhole and CMP										
00E1012	DIRT	U.C. per hr	1	00E1012	0	91.41	0	0	0	0	91.41
	Cat 330 1.75 cy Hoe		40.00	40		\$0	\$3,656	\$0	\$0	\$0	\$3,656
	Equipment Operators, Medium Equipment	DIRT	U.C. per hr	1	CN-EQHV	35.49	0	0	0	0	35.49
			40.00	40	\$35.49	\$1,420	\$0	\$0	\$0	\$0	\$1,420
	LABORER EXCAVATION, BACKFILL, FOUNDATIONS, TRENCHES	DIRT	U.C. per hr	3	CN-LABE	57.32	0	0	0	0	97.32
			40.00	120	\$32.44	\$3,893	\$0	\$0	\$0	\$0	\$3,893
Subtotal						\$5,312	\$3,658	\$0	\$0	\$0	\$8,969
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads						\$2,228	\$1,533	\$0	\$0	\$0	\$3,761
Subtotal Estimate											\$12,730
Escalation						\$0	\$0	\$0	\$0	\$0	\$0
Contingency						\$754	\$519	\$0	\$0	\$0	\$1,273
--Total 9102.03 Install GFE Manhole and CMP				180		\$8,294	\$5,709	\$0	\$0	\$0	\$14,003
9102.04	New Pavement										
	GEN	U.C. per tn				0	0	0	100	0	100
	Misc Asphalt Placement at Stack		100.00	0		\$0	\$0	\$0	\$10,000	\$0	\$10,000

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action Phase 1**Client: **N. K. Rogers**Project Location: **INTEC**
Estimate Number: **2960-A**Prepared By: **J. C. Grenz**
Estimate Type: **Title II**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9102.04 New Pavement											
	Crushed Base	GEN	65.00	0	UC. percy	0	0	0	40	0	40
						\$0	\$0	\$0	\$2,600	\$0	\$2,600
	Misc Asphalt Placement at Fuel Tanks	GEN	30.00	0	U.C. per hr	0	0	0	85	0	85
						\$0	\$0	\$0	\$2,550	\$0	\$2,550
	Crushed Base	GEN	20.00	0	U.C. percy	0	0	0	40	0	40
						\$0	\$0	\$0	\$800	\$0	\$800
	Misc Asphalt Placement at #6	GEN	30.00	0	U.C. per hr	0	0	0	85	0	85
						\$0	\$0	\$0	\$2,550	\$0	\$2,550
	Crushed Base	GEN	20.00	0	U.C. percy	0	0	0	40	0	40
						\$0	\$0	\$0	\$800	\$0	\$800
	Misc Asphalt Placement at #64	GEN	65.00	0	U.C. per hr	0	0	0	85	0	85
						\$0	\$0	\$0	\$5,525	\$0	\$5,525
	Crushed Base	GEN	45.00	0	U.C. percy	0	0	0	40	0	40
						\$0	\$0	\$0	\$1,600	\$0	\$1,600
Subtotal						\$0	\$0	\$0	\$26,625	\$0	\$26,625
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads						\$0	\$0	\$0	\$7,729	\$0	\$7,729
Subtotal Estimate						\$0	\$0	\$0	\$0	\$0	\$34,354
Escalation						\$0	\$0	\$0	\$3,435	\$0	\$3,435
Contingency						\$0	\$0	\$0	\$0	\$0	\$0
—Total 9102.04 New Pavement				0		\$0	\$0	\$0	\$37,790	\$0	\$37,790
9102.05 Grade Pond											
	Surveyors	DIRT	20.00	40	U.C. per hr	68.34	0	0	0	0	68.34
						\$33.17	\$0	\$0	\$0	\$0	\$1,327
	Cat 12 Grader	DIRT	30.00	30	U.C. per hr	0	43.38	0	0	0	43.38
						\$0	\$1,301	\$0	\$0	\$0	\$1,301
	Cat CS-433 Vib Smooth Drum Compactor	DIRT	30.00	30	U.C. per hr	0	26.47	0	0	0	26.47
						\$0	\$794	\$0	\$0	\$0	\$794
	Cat 950 4 cy Loader	DIRT	30.00	30	U.C. per hr	0	43.83	0	0	0	43.83
						\$0	\$1,315	\$0	\$0	\$0	\$1,315
	Equipment Operators, Medium Equipment	DIRT	30.00	90	U.C. per hr	104.25	0	0	0	0	104.25
						\$34.75	\$3,128	\$0	\$0	\$0	\$3,128
	12 cy End Dump	DIRT	20.00	20	U.C. per hr	0	31.45	0	0	0	31.45
						\$0	\$629	\$0	\$0	\$0	\$629

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax
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DETAIL ITEM REPORT

Project Name: Tank Farm Interim Action Phase 1

Project Location: INTEC
Estimate Number: 2960-AClient: N. K. Rogers
Prepared By: J. C. Grenz
Estimate Type: Title II

Code	Description	Contractor	Qty	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
9102.05	Grade Pond										
	4000 gal Water Truck	DIRT	U.C. per hr	1	00E2050	0	31.38	0	0	0	31.38
			20.00	20		\$0	\$628	\$0	\$0	\$0	\$628
	Truck Drivers. Heavy	DIRT	U.C. per hr	2	CN-TRHV	66.96	0	0	0	0	66.96
			20.00	40	\$33.48	\$1,339	\$0	\$0	\$0	\$0	\$1,339
	Laborer	DIRT	U.C. per hr	2	CN-LABR	63.16	0	0	0	0	63.16
			20.00	40	\$31.58	\$1,263	\$0	\$0	\$0	\$0	\$1,263
Subtotal *						\$7,057	\$4,667	\$0	\$0	\$0	\$11,724
Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads						\$2,959	\$1,957	\$0	\$0	\$0	\$4,916
Subtotal Estimate											\$16,640
Escalation						\$0	\$0	\$0	\$0	\$0	\$0
Contingency						\$1,002	\$662	\$0	\$0	\$0	\$1,664
— Total 3102.09 Grade Pond				210		\$11,017	\$7,286	\$0	\$0	\$0	\$18,304
9102.06	Pond Liner										
	16oz Geotex Cushion	LINE	U.C. per sf	0.003	CN-LABR	0.095	0	0.18	0	0	0.275
			165,600.00	497	\$31.58	\$15,689	\$0	\$29,808	\$0	\$0	\$45,497
	60 mill HDPE Secondary Uner	UNE	U.C. per sf	0.004	CN-LABR	0.126	0	0.35	0	0	0.476
			165,600.00	662	\$31.58	\$20,919	\$0	\$57,960	\$0	\$0	\$78,879
	Geonet	LINE	U.C. per sf	0.003	CN-LABR	0.095	0	0.25	0	0	0.345
			165,600.00	497	\$31.58	\$15,689	\$0	\$41,400	\$0	\$0	\$57,089
	60 mill HDPE Primary Uner	LINE	U.C. per sf	0.004	CN-LABR	0.126	0	0.35	0	0	0.476
			165,600.00	682	\$31.58	\$20,919	\$0	\$57,960	\$0	\$0	\$78,879
	Ballast Bags	LINE	U.C. per ea	9	CN-LABR	284.22	0	20	0	0	304.22
			165.00	1,485	\$31.58	\$46,896	\$0	\$3,300	\$0	\$0	\$50,196
	Ladder Rungs	LINE	U.C. per ea	0.25	CN-LABR	7.895	0	10	0	0	17.895
			40.00	10	\$31.58	\$316	\$0	\$400	\$0	\$0	\$716

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: Tank F a nInterimAction Phase 1

Client: N. K. Rogers
Prepared By: J. C. Grenz
Estimate Type: Title II

Project Location: INTEC
Estimate Number: 2960-A

Code	Description	Contractor	Qty	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
9102.06	Pond Liner										
	Sump	LINE	UC. per ea	100	40	CN-LABR	1263.2	0	50	0	13132
						\$31.58	\$1.263	\$0	\$50	\$0	\$1,313
Subtotal						\$121,690	\$0	\$190,878	\$0	\$0	\$312,568
Sales Tax						\$0	\$0	\$9,544	\$0	\$0	\$9,544
INEEL/Subcontractor Overheads						\$83,799	\$0	\$138,015	\$0	\$0	\$221,814
Subtotal Estimate						\$0	\$0	\$0	\$0	\$0	\$543,926
Escalation						\$20,549	\$0	\$33,844	\$0	\$0	\$54,393
Contingency											
— Total 9102.06 Pond Liner				3,653		\$226,038	\$0	\$372,281	\$0	\$0	\$598,319
9102.07	Ex and Fill Ductbank										
	EXCAVATION		UC. per	100	0		0	0.01	0	0	0.01
						\$0	\$0	\$0	\$0	\$0	\$0
	DIRT		UC. per hr	20.00	1	WE0930	0	28.68	0	0	28.68
	Case 590 Loader/Hoe				20		\$0	\$574	\$0	\$0	\$574
	DIRT		UC. per hr	20.00	1	CN-EQMD	34.75	0	0	0	34.75
	Equipment Operators. Medium Equipment				20	\$34.75	\$695	\$0	\$0	\$0	\$695
	DIRT		U.C. per ht	20.00	1	CN-LABE	32.44	0	0	0	32.44
	LABORER EXCAVATION, BACKFILL, FOUNDATIONS. TRENCHES				20	\$32.44	\$649	\$0	\$0	\$0	\$649
	FILL		U.C. per	1.00	0		0	0.01	0	0	0.01
						\$0	\$0	\$0	\$0	\$0	\$0
	DIRT		UC. per hr	10.00	1	00E0930	0	28.68	0	0	28.68
	Case 590 Loader/Hoe				10		\$0	\$287	\$0	\$0	\$287
	DIRT		U.C. per hr	10.00	1	00E0620	0	11.82	0	0	11.82
	Bowmag BW90 Compactor				10		\$0	\$118	\$0	\$0	\$118
	DIRT		U.C. per hr	10.00	2	CN-EQMD	59.5	0	0	0	69.5
	Equipment Operator. Medium Equipment				20	\$34.75	\$695	\$0	\$0	\$0	\$695

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax
Page No. 1

J-2-12

DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action Phase 1**Client: **N. K. Rogers**Project Location: **INTEC**Prepared By: **J. C. Grenz**Estimate Number: **2960-A**Estimate Type: **Title II**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9102.07 Ex and Fill Ductbank											
	DIRT	U.C. per hr		3	CN-LABE	97.32	0	0	0	0	97.32
	LABORER EXCAVATION, BACKFILL, FOUNDATIONS, TRENCHES		10.00	30	\$32.44	\$973	\$0	\$0	\$0	\$0	\$973
<hr/>											
	Subtotal					\$3,012	\$979	\$0	\$0	\$0	\$3,991
	Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	41.93%				\$1,263	5410	\$0	\$0	\$0	\$1,673
<hr/>											
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$5,664
	Escalation					\$428	\$139	\$0	\$0	\$0	\$0
	Contingency										\$566
<hr/>											
---Total 9102.07 Ex and Fill Ductbank				90		\$4,703	\$1,528	\$0	\$0	\$0	\$6,230
<hr/>											
9103.01 Head and End Walls											
	GEN	U.C. per sf		02	CN-CARC	7.432	1.35	0	0	0	8.782
	Form & Strip		732.00	146	\$37.16	\$5,440	\$988	\$0	\$0	\$0	\$6,428
	GEN	U.C. per lb		0.012	CN-IRON	0.522	0.05	0.35	0	0	0.922
	Place Rebar		900.00	11	\$43.50	\$470	\$45	\$315	\$0	\$0	\$830
	GEN	U.C. per cy		0.5	CN-LABR	15.79	0	100	0	0	115.79
	Place Concrete		10.50	5	\$31.58	\$166	\$0	\$1,050	\$0	\$0	\$1,216
	GEN	U.C. per sf		0.01	CN-LABR	0.316	0.06	0	0	0	0.376
	Cure Concrete		732.00	7	\$31.58	\$231	\$44	\$0	\$0	\$0	\$275
<hr/>											
	Subtotal					\$6,307	\$1,077	\$1,365	\$0	\$0	\$8,749
	Sales Tax					\$0	\$0	\$68	\$0	\$0	\$68
	INEEL/Subcontractor Overheads	29.03%				\$1,831	\$313	\$416	\$0	\$0	\$2,560
<hr/>											
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$11,377
	Escalation					\$814	\$139	\$185	\$0	\$0	\$0
	Contingency										\$1,138
<hr/>											
---Total 9103.01 Head and End Walls				170		\$1,952	\$1,529	\$2,034	\$0	\$0	\$12,514
<hr/>											
9103.02 Concrete Ditches											
	GEN	U.C. per sq		3	CN-LABR	94.74	0	80	0	0	174.74
	Type 1 and 2 Conc Place		50.00	150	\$31.56	\$4,737	\$0	\$4,000	\$0	\$0	\$6,737
	GEN	U.C. per cy		4	CN-LABR	126.32	0	80	0	0	206.32
	Type 3 Conc Place		137.00	548	\$31.58	\$17,306	\$0	\$10,960	\$0	\$0	\$28,266

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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J-2-14

DETAIL ITEM REPORT

Project Name: Tank Farm Interim Action Phase 1

Project Location: INTEC
Estimate Number: 2960-A

Client: N. K. Rogers
Prepared By: J. C. Grenz
Estimate Type: Title II

Code	Description	Contractor	Qty	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
9103.02	Concrete Ditches										
	Place Rebar	GEN	15,200.00	0.013 198	CN-IRON \$43.60	\$0.568 \$8,596	0.05 \$760	0.35 \$5,320	0 \$0	0 \$0	0.966 \$14,676
	Subtotal					\$30,638	\$760	\$20,280	\$0	\$0	\$51,678
	Sales Tax					\$0	\$0	\$1,014	\$0	\$0	\$1,014
	INEEL/Subcontractor Overheads		29.03%			\$8,894	\$221	\$6,182	\$0	\$0	\$15,297
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$67,989
	Escalation					\$3,953	\$98	\$2,748	\$0	\$0	\$0
	Contingency										\$6,799
	--- Total 9103.02 Concrete Ditched			896		\$43,486	51,079	530,223	\$0	\$0	574,708
9103.03	New Ductbank										
	Form & Strip	GEN	340.00	0.18 61	CN-CARC \$37.16	6.689 \$2,274	1.2 \$408	0 \$0	0 \$0	0 \$0	7.889 \$2,682
	Place Rebar	GEN	1,800.00	0.012 22	CN-IRON \$43.50	0.522 \$940	0.05 \$90	0.35 \$630	0 \$0	0 \$0	0.922 \$1,660
	Place Concrete	GEN	28.00	0.5 14	CN-LABR \$31.58	15.78 \$442	0 \$0	100 \$2,800	0 \$0	0 \$0	115.79 \$3,242
	Cure Concrete	GEN	680.00	0.01 7	CN-LABR \$31.58	0.316 \$215	0.06 \$41	0 \$0	0 \$0	0 \$0	0.376 \$256
	Subtotal					\$3,871	\$539	\$3,430	\$0	\$0	\$7,839
	Sales Tax					\$0	\$0	\$172	\$0	\$0	\$172
	INEEL/Subcontractor Overheads		29.03%			\$1,124	\$156	\$1,046	\$0	\$0	\$2,326
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$10,337
	Escalation					\$499	\$70	\$465	\$0	\$0	\$0
	Contingency										\$1,034
	--- Total 9103.03 New Ductbank			104		\$5,494	\$765	\$5,112	\$0	\$0	\$11,370
9105.01	Frame at Pond										
	Gravel Posts	STEEL	200	4 e	CN-IRON \$43.50	174 \$348	0 \$0	50 \$100	0 \$0	0 \$0	224 \$448

J-2-15

DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action Phase 1**Client: **N. K. Rogers**Project Location: **INTEC**Prepared By: **J. C. Grenz**Estimate Number: **2960-A**Estimate Type: **Title II**

Code	Description	contractor	Qty	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
p105.01	Frame at Pond										
	Structural Frame	STEEL	U.C. per ea	1.00	8	CN-IRON	348	0	100	0	448
				8		\$43.50	\$348	\$0	\$100	\$0	\$448
<hr/>											
	Subtotal					\$896	\$0	\$200	\$0	\$0	\$896
	Sales Tax					\$0	\$0	\$10	\$0	\$0	\$10
	INEEL/Subcontractor Overheads	41.93%				\$292	\$0	\$88	\$0	\$0	\$380
<hr/>											
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$1,286
	Escalation					\$99	\$0	\$30	\$0	\$0	\$0
	Contingency						\$0	\$0	\$0	\$0	\$129
<hr/>											
---Total 9105.01 Frame at Pond				16		\$1,087	\$0	\$326	\$0	\$0	\$1,415
<hr/>											
9115.01	Pipe at Pond										
	12" dia HDPE	PIPE	U.C. per lf	80.00	0.3	CN-PIPE	11,799	0	8.5	0	20,299
				24		\$39.33	\$944	\$0	\$680	\$0	\$1,624
	1 1/2" sch 80 PVC	PIPE	U.C. per lf	100.00	0.25	CN-PIPE	9,833	0	1.8	0	11,633
				25		\$39.33	\$983	\$0	\$180	\$0	\$1,163
	1/2 HP Pump and Controller	PIPE	U.C. per ea	1.00	8	CN-PIPE	314.64	0	6000	0	6314.64
				8		\$38.33	\$315	\$0	\$6,000	\$0	\$8,325
	1/2" sch 80 PVC	PIPE	U.C. per lf	20.00	0.25	CN-PIPE	9,833	0	1.5	0	11,333
				5		\$39.33	\$197	\$0	\$30	\$0	\$227
	1 1/2" PVC DFittings	PIPE	U.C. per ea	6.00	0.5	CN-PIPE	19,865	0	11.5	0	31,165
				3		\$39.33	\$118	\$0	\$69	\$0	\$187
	1/2" PVC DFittings	PIPE	U.C. per ea	8.00	0.5	CN-PIPE	19,865	0	5	0	24,665
				3		\$39.33	\$118	\$0	\$30	\$0	\$148
	1/4 Ball Valve	PIPE	U.C. per ea	1.00	0.5	CN-PIPE	19.68	0	25	0	44.65
				1		\$39.32	\$20	\$0	\$25	\$0	\$45
	1" Totalizer	PIPE	U.C. per ea	1.00	5	CN-PIPE	196.65	0	1200	0	1396.65
				5		\$39.33	\$197	\$0	\$1,200	\$0	\$1,397
<hr/>											
	Subtotal					\$2,891	\$0	\$8,214	\$0	\$0	\$11,105
	Sales Tax					\$0	\$0	\$411	\$0	\$0	\$411
	INEEL/Subcontractor Overheads	48.10%				\$1,391	\$0	\$4,149	\$0	\$0	\$5,539
<hr/>											
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$17,055
	Escalation					\$428	\$0	\$1,277	\$0	\$0	\$0
	Contingency						\$0	\$0	\$0	\$0	\$1,705
<hr/>											
---Total 9115.01 Pipe at Pond				74		\$4,709	\$0	\$14,051	\$0	\$0	\$18,760

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DETAIL ITEM REPORT

Project Name: Tank Farm Interim Action Phase 1

Project Location: INTEC
Estimate Number: 2960-A

Client: N K. Rogers
Prepared By: J C Grenz
Estimate Type: Title II

Code	Description	Contractor	Qty	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
9116.2 SWITCHGEAR, TRANSFORMERS, AND DEVICES											
	600 volt, 60A NF Disconnect Nema 3R	ELEC U.C. per Ea	1.00	2.5	CN-ELEC	89.72	0	331	0	0	420.72
				3		\$35.89	\$90	\$0	\$331	\$0	\$421
	GE#9L15ECB001 Surge Arrestor	ELEC U.C. per Ea	1.00	0.5	CN-ELEC	17.95	0	125	0	0	142.95
				1		\$35.90	\$18	\$0	\$125	\$0	\$143
	Transformer/Dist. Center	ELEC U.C. per Ea	1.00	6	CN-ELEC	215.34	0	2500	0	0	2715.34
				6		\$35.89	\$215	\$0	\$2,500	\$0	\$2,715
	CP-CW2-902 Pump Control Panel	ELEC U.C. per Ea	1.00	8	CN-ELEC	215.34	0	0	0	0	215.34
				6		\$35.89	\$215	\$0	\$0	\$0	\$215
Memo: Control panel and ultra sonic level switches are included in the pump pricing. Equipment will be installed by the electrical contractor.											
	LS-CW-2-203-3 Ultra Sonic Level Switch, GEMULS-10	ELEC U.C. per Ea	3.00	0.5	CN-ELEC	17.847	0	0	0	0	17.947
				2		\$35.89	\$54	\$0	\$0	\$0	\$54
Subtotal						\$592	\$0	\$2,958	\$0	\$0	\$3,548
Sales Tax						\$0	\$0	\$148	\$0	\$0	\$148
INEEL/Subcontractor Overheads						\$248	\$0	\$1,302	\$0	\$0	\$1,550
Subtotal Estimate											\$1,246
Escalation						\$0	\$0	\$0	\$0	\$0	\$0
Contingency						\$84	\$0	\$441	\$0	\$0	\$525
— Total 9116.2 SWITCHGEAR, TRANSFORMERS, AND DEVICES				17		\$925	\$0	\$4,846	\$0	\$0	\$5,770
9116.3 RACEWAYS AND ENCLOSURES											
	3/4" EYS with Sealing Compound	ELEC U.C. per Ea	3.00	0.5	CN-ELEC	17.947	0	13.5	0	0	31.447
				2		\$35.89	\$54	\$0	\$41	\$0	\$94
	3/4" Sealtite Flex	ELEC U.C. per Lf	80.00	0.08	CN-ELEC	2.871	0	2.12	0	0	4.991
				6		\$35.89	\$230	\$0	\$170	\$0	\$399
	3/4" Sealtite flex Connectors	ELEC U.C. per Ea	8.00	0.2	CN-ELEC	7.178	0	5	0	0	12.178
				2		\$35.89	\$57	\$0	\$40	\$0	\$97
	FS box, 3/4" Hubs, with gasket and cover	ELEC U.C. per Ea	1.00	0.3	CN-ELEC	10.77	0	25	0	0	35.77
				0		\$35.90	\$11	\$0	\$25	\$0	\$36
	SST hose clamps	ELEC U.C. per Ls	1.00	1	CN-ELEC	35.89	0	50	0	0	85.89
				1		\$35.89	\$36	\$0	\$50	\$0	\$86
	5" core drills	ELEC U.C. per Ea	4.00	0		0	0	0	250	0	250
				0		\$0	\$0	\$0	\$1,000	\$0	\$1,000
	4" Rigid Conduit	ELEC U.C. per Lf	700.00	0.3	CN-ELEC	10.767	0	8.4	0	0	19.167
				210		\$35.89	\$7,537	\$0	\$5,880	\$0	\$13,417
	4 Rigid 90 deg. ell's with coupling	ELEC U.C. per Ea	4.00	2	CN-ELEC	71.78	0	250	0	0	321.78
				8		\$35.89	\$287	\$0	\$1,000	\$0	\$1,287

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Material Costs where applicable include Idaho State Sales Tax
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DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action Phase 1**Client: **N. K. Rogers**Project Location: **INTEC**Prepared By: **J. C. Grenz**Estimate Number: **2960-A**Estimate Type: **Title II**

Code	Description	Contractor	Qty	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
9116.3 RACEWAYS AND ENCLOSURES											
	4" Grounding Bushings	ELEC	U.C. per Ea	4.00	0.5	2	CN-ELEC	17.945	0	50	67.945
								\$35.89	\$72	\$0	3272
	5" PVC Conduit	ELEC	U.C. per Lf	720.00	0.08	58	CN-ELEC	2.871	0	2.3	5.171
								\$35.89	\$2,067	\$0	\$3,723
	5" PVC Couplings	ELEC	U.C. per Ea	16.00	0.3	5	CN-ELEC	10.767	0	12	22.767
								\$35.89	\$172	\$0	\$364
	5 Spacers	ELEC	U.C. per Ea	100.00	0.1	10	CN-ELEC	3.589	0	1.5	5.089
								\$35.89	\$359	\$0	\$509
<hr/>											
	Subtotal							\$10,882	\$0	\$9,403	\$21,285
	Sales Tax							\$0	\$0	\$470	\$470
	INEEL/Subcontractor Overheads	41.93%						\$4,563	\$0	\$4,140	\$9,123
<hr/>											
	Subtotal Estimate							\$0	\$0	\$0	\$30,878
	Escalation							\$1,544	\$0	\$0	\$0
	Contingency							\$0	\$0	\$1,401	\$3,088
<hr/>											
-- Total 9116.3 RACEWAYS AND ENCLOSURES				303				\$16,989	\$0	\$15,415	\$33,965
<hr/>											
9116.4.1 PUMP POWER AND CONTROL CABLES											
	Pump Power Cord, Install only, furnished with pump	ELEC	U.C. per Lf	40.00	0.05	2	CN-ELEC	1.795	0	0	1.795
								\$35.89	\$72	\$0	\$72
	Coax Cable, supplied with pump	ELEC	U.C. per LF	40.00	0.05	2	CN-ELEC	1.795	0	0	1.795
								\$35.89	\$72	\$0	\$72
<hr/>											
	Subtotal							\$144	\$0	\$0	\$144
	Sales Tax							\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	41.93%						\$60	\$0	\$0	\$60
<hr/>											
	Subtotal Estimate							\$0	\$0	\$0	\$204
	Escalation							\$0	\$0	\$0	\$0
	Contingency							\$20	\$0	\$0	\$20
<hr/>											
-- Total 9116.4.1 PUMP POWER AND CONTROL CABLES				4				\$224	\$0	\$0	\$224
<hr/>											
9116.4.2 600 VOLT CABLE AND POWER CABLE											
	New 4/0 15kV power	ELEC	U.C. per Lf	3,300.00	0.048	158	CN-ELEC	1.723	0	3.5	5.223
								\$35.89	\$5,685	\$0	\$17,235
	1/0 Ground	ELEC	U.C. per Lf	1,100.00	0.024	26	CN-ELEC	0.861	0	0.8	1.661
								\$35.89	\$948	\$0	\$1,828
	Confined space entry	ELEC	U.C. per Ea	6.00	4	24	CN-ELEC	143.56	0	0	143.56
								\$35.89	\$861	\$0	\$861

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DETAIL ITEM REPORT

Project Name: Tank Farm Interim **Action Phase 1**Client **N. K. Rogers**Project Location: **INTEC**
Estimate Number: **2960-A**Prepared By: **J. C. Grenz**
Estimate Type: **Title II**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9116.4.2	600VOLT CABLE ANDPOWER CABLE										
	ELEC	U.C. per Lf	0.048		CN-ELEC	1.723	0	3.5	0	0	5 223
	New TEMPORARY 41015KV power		2,100.00	101	\$35.89	\$3,618	\$0	\$7,350	\$0	\$0	\$10,968
	ELEC	U.C. per Lf	0.024		CKELEC	0.861	0	0.8	0	0	1661
	Temporary 1/0 Ground		700.00	17	\$35.69	\$603	\$0	\$560	\$0	\$0	\$1,163
	ELEC	U.C. per Ea		4	CN-ELEC	143.56	0	0	0	0	143 56
	Confined space entryfor installation of temporary cables		4.00	16	\$35.89	\$574	\$0	\$0	\$0	\$0	\$574
	ELEC	U.C. per Ea		4	CN-ELEC	143.56	0	46	0	0	191 56
	Splice kits		24.00	96	\$35.89	\$3,445	\$0	\$1,152	\$0	\$0	\$4,597
Subtotal						\$15,734	\$0	\$21,492	\$0	\$0	\$37,226
Sales Tax						\$0	\$0	\$1,075	MI	\$0	\$1,075
INEEL/Subcontractor Overheads						\$6,598	\$0	\$9,463	\$0	\$0	\$16,061
Subtotal Estimate						\$0	\$0	\$0	\$0	\$0	\$54,361
Escalation						\$2,233	\$0	\$3,203	\$0	\$0	\$5,436
Contingency											
---Total 9116.4.2 600 VOLT CABLE ANDPOWER CABLE				438		\$24,566	\$0	\$35,232	\$0	\$0	\$59,798
9116.5	TESTING										
	ELEC	U C. per Ea		4	CN-ELEC	143 56	0	0	0	0	143 56
	Hi-Pot testing		12.00	48	\$35 89	\$1,723	\$0	\$0	\$0	\$0	\$1,723
	ELEC	U C per Ls		16	CN-ELEC	574 24	0	0	0	0	574 24
	Testing of electrical systems and equipment		1.00	16	\$35 89	\$574	\$0	\$0	\$0	\$0	\$574
Subtotal						\$2,297	\$0	\$0	\$0	\$0	\$2 291
Sales Tax						\$0	\$0	\$0	MI	\$0	\$0
INEEL/Subcontractor Overheads						\$963	\$0	\$0	\$0	\$0	\$963
Subtotal Estimate						\$0	\$0	\$0	\$0	\$0	\$3,260
Escalation						\$326	\$0	\$0	\$0	\$0	\$326
Contingency											
---Total 9116.5 TESTING				64		\$3,886	\$0	\$0	\$0	\$0	\$3,586

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax
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DETAIL ITEM REPORT

Project Name: *Tank Farm Interim Action Phase 1*

Client: *N. K. Rogers*

Project Location: *INTEC*

Prepared By: *J. C. Grenz*

Estimate Number: *2960-A*

Estimate Type: *Title II*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
	Subtotal TF Phase I					\$265,313	\$16,143	\$258,218	\$27,625	\$0	\$567,300
	Sales Tax					\$0	\$0	\$12,911	\$0	\$0	\$12,911
	INEEL/Subcontractor Overheads					\$133,376	\$6,197	\$164,800	\$8,449	\$0	\$312,522
	Subtotal Estimate										\$092,732
	Escalation					\$0	\$0	\$0	\$0	\$0	\$0
	Contingency					\$39,869	\$2,234	\$43,593	\$3,577	\$0	\$89,273
	Total TF Phase I			7,862		\$438,559	\$24,574	\$479,522	\$39,351	\$0	\$982,005

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Material Costs where applicable include Idaho State Sales Tax
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Appendix J–3
Revised Phase II Detailed Cost Estimate

Project Summary Report

Project Name: *Tank Farm Interim Action*
Phase II Construction
 Project Location: *INTEC*
 Estimate Number: *2960-8*

Client: *J. C. Hurst*
 Prepared By: *J. C. Grenz*
 Estimate Type: *Planning*

<u>Level</u>	<u>Group</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency %</u>	<u>TOTAL</u>
1000		CONSTRUCTION MANAGEMENT	\$180,187	\$0	\$36,037	20.00%	\$216,224
1100		--CONSTRUCTION SUPERVISION & ENGINEERING	\$180,187	\$0	\$36,037	20.00%	\$216,224
5000		PROJECT MANAGEMENT	\$57,912	\$0	\$8,687	15.00%	\$66,599
5100		--PM ADMINISTRATION	\$57,912	\$0	\$8,687	15.00%	\$66,599
9000		CONSTRUCTION	\$205,305	\$0	\$41,061	20.00%	\$246,366
9100		--CONSTRUCTION SUBCONTRACTS	\$179,332	\$0	\$35,866	20.00%	\$215,198
9101		---GENERAL CONDITIONS	\$56,598	\$0	\$11,320	20.00%	\$67,917
9102		----SITEWORK	\$122,734	\$0	\$24,547	20.00%	\$147,281
9102.01		-----Grade Surface for Pavement	\$39,966	\$0	\$7,993	20.00%	\$47,960
9102.02		-----Pave Over Tanks	\$17,247	\$0	\$3,449	20.00%	\$20,696
9102.03		-----Pave on Slope	\$5,457	\$0	\$1,091	20.00%	\$6,548
9102.04		-----Excavate for Pipe	\$53,288	\$0	\$10,658	20.00%	\$63,946
9102.05		-----Install Pipes	\$6,775	\$0	\$1,355	20.00%	\$8,131
9300		--CONSTRUCTION SUPPORT	\$17,149	\$0	\$3,430	20.00%	\$20,579
9310		---CONSTRUCTION SUPPORT - RADTECH	\$17,149	\$0	\$3,430	20.00%	\$20,579
9400		--CONSTRUCTION QUALITY CONTROL	\$8,824	\$0	\$1,765	20.00%	\$10,589
Total Tank Farm Phase II			\$443,404	\$0	\$85,785	19.35%	\$529,189

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DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action**
Phase II Construction
 Project Location: **INTEC**
 Estimate Number: **2960-B**

Client: **J. C. Hurst**
 Prepared By: **J. C. Grenz**
 Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1100 CONSTRUCTION SUPERVISION & ENGINEERING												
	CM SUBCONTRACT TECH. REP. (pre job)	BBWI-C	80.00	hr	80	595.52 F27	95.52 \$7,642	0 \$0	0 \$0	0 \$0	0 \$0	95.52 \$7,642
	CM PLANNER (pre job)	BBWI-A	40.00	hr	40	58.05 F10	58.055 \$2,322	0 \$0	0 \$0	0 \$0	0 \$0	58.055 \$2,322
	SIC ADMINISTRATOR (pre job)	BBWI-A	80.00	hr	80	64.87 P21	64.868 \$5,189	0 \$0	0 \$0	0 \$0	0 \$0	64.868 \$5,189
	CM CONSTRUCTION COORDINATOR	BBWI-C	15.00	wk	150	106.16 F25	1061.6 \$15,924	0 \$0	0 \$0	0 \$0	0 \$0	1061.6 \$15,924
	CM FIELD ENGINEER	BBWI-C	15.00	wk	150	110.26 F26	1102.6 \$16,539	0 \$0	0 \$0	0 \$0	0 \$0	1102.6 \$16,539
	CM SUBCONTRACT TECH. REP.	BBWI-C	15.00	wk	600	95.52 F27	3820.8 \$57,312	0 \$0	0 \$0	0 \$0	0 \$0	3820.8 \$57,312
	CM PLANNER	BBWI-A	15.00	wk	75	58.05 F10	290.274 \$4,354	0 \$0	0 \$0	0 \$0	0 \$0	290.274 \$4,354
	QUALITY	BBWI-A	15.00	wk	150	174.45 E17	744.284 \$11,164	0 \$0	0 \$0	0 \$0	0 \$0	744.284 \$11,164
	SAFETY	BBWI-A	15.00	wk	150	78.85 E19	768.537 \$11,528	0 \$0	0 \$0	0 \$0	0 \$0	768.537 \$11,528
	INDUSTRIAL HYGIENE	BBWI-A	15.00	wk	75	170.89 S08	354.445 \$5,317	0 \$0	0 \$0	0 \$0	0 \$0	354.445 \$5,317
	PROCUREMENT- S/C ADMINISTRATOR	BBWI-A	15.00	wk	150	64.87 P21	648.675 \$9,730	0 \$0	0 \$0	0 \$0	0 \$0	648.675 \$9,730

DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action**
Phase II Construction
 Project Location: **INTEC**
 Estimate Number: **2960-B**

Client: **J. C. Hurst**
 Prepared By: **J. C. Grenz**
 Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1100 CONSTRUCTION SUPERVISION & ENGINEERING												
	ENVIRONMENTAL	BBWI-A	<i>U.C. per wk</i>	15.00	wk	5 75	<i>\$79.75</i> EO8	398.747 \$5,981	0 \$0	0 \$0	0 \$0	0 \$0
Subtotal								\$153,003	\$0	\$0	\$0	\$153,003
Sales Tax								\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads								527.184	\$0	\$0	\$0	\$27,184
Subtotal Estimate												\$180,187
Escalation								\$0	\$0	\$0	\$0	\$0
Contingency								\$36,037	\$0	\$0	\$0	\$36,037
Total 1100 CONSTRUCTION SUPERVISION & ENGINEERING					1,775			\$216,224	\$0	\$0	\$0	\$216,224

5100 PM ADMINISTRATION

ORIGINATE WCF	BBWI-A	<i>U.C. per LOT</i>	1.00	LOT	4 4	<i>\$96.80</i> E34	387.18 \$387	0 \$0	0 \$0	0 \$0	0 \$0	387.18 \$387
FINALIZE HPSC	BBWI-A	<i>U.C. per LOT</i>	1.00	LOT	40 40	<i>\$96.80</i> E34	3871.8 \$3,872	0 \$0	0 \$0	0 \$0	0 \$0	3871.8 \$3,872
Assemble Planning Team	BBWI-A	<i>U.C. per Lot</i>	1.00	Lot	10 10	<i>\$96.80</i> E34	967.95 \$968	0 \$0	0 \$0	0 \$0	0 \$0	967.95 \$968
DETERMINE PLANNING LEVEL AND UPDATE WCF	BBWI-A	<i>U.C. per LOT</i>	1.00	LOT	4 4	<i>\$96.80</i> E34	387.18 \$387	0 \$0	0 \$0	0 \$0	0 \$0	387.18 \$387
PREPARE SUPPORTING HAZARDOUS PROJECT DOCUMENTATION	BBWI-A	<i>U.C. per LOT</i>	1.00	LOT	30 30	<i>\$96.80</i> E34	2903.85 \$2,904	0 \$0	0 \$0	0 \$0	0 \$0	2903.85 \$2,904
POST JOB REVIEW	BBWI-A	<i>U.C. per LOT</i>	1.00	LOT	10 10	<i>\$96.80</i> E34	967.95 \$968	0 \$0	0 \$0	0 \$0	0 \$0	967.95 \$968
PROJECT MANAGEMENT	BBWI-A	<i>U.C. per wk</i>	20.00	wk	20 400	<i>\$90.78</i> Z09	1815.577 \$36,312	0 \$0	0 \$0	0 \$0	0 \$0	1815.577 \$36,312

DETAIL ITEM REPORT

Project Name: ***TankFarm Interim Action
Phase II Construction***
Project Location: ***INTEC***
Estimate Number: 2960-5

Client: **J. C. Hurst**
Prepared By: **J C. Grenz**
Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
5100 PM ADMINISTRATION												
	Revise SAR	BBWI-A	<i>U.C. per wk</i>		40	\$76.85	3074.15	0	0	0	20	3094.15
			2.00	wk	80	E19	\$6,148	\$0	\$0	\$0	\$40	\$6,188
	Subtotal						\$51,946	\$0	\$0	\$0	\$40	\$51,986
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads		11.40%				\$5,922	\$0	\$0	\$0	\$5	\$5,926
	Subtotal Estimate											\$57,912
	Escalation						\$0	\$0	\$0	\$0	\$0	\$0
	Contingency						\$8,680	\$0	\$0	\$0	\$7	\$8,687
--Total 5100 PM ADMINISTRATION					578		\$66,548	\$0	\$0	\$0	\$51	\$66,599

9101 GENERAL CONDITIONS

WORKABILITY WALKDOWN- 1 HR/DAY X 10_ WORKERS X 4 DAY/WK	GEN	U.C. per Wks	15.00	Wks	40 600	\$32.44 CN-LABE	7297.6 \$19,464	0 \$0	0 \$0	0 \$0	0 \$0	1297.6 \$19,464
POST JOB REVIEW	GEN	U.C. per LOT	7.00	LOT	10 10	\$40.00 CN-SUPR	400 \$400	0 \$0	0 \$0	0 \$0	0 \$0	400 \$400
Non-working Super	GEN	U.C. per whs	15.00	wks	40 600	\$40.00 CN-SUPR	1600 \$24,000	0 \$0	0 \$0	0 \$0	0 \$0	1600 \$24,000
Subtotal							\$43,864	\$0	\$0	\$0	\$0	\$43,864
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads		29.03%					\$12,734	\$0	\$0	\$0	\$0	\$12,734
Subtotal Estimate												\$56,598
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$11,320	\$0	\$0	\$0	\$0	\$11,320
---Total	9101 GENERAL CONDITIONS				1,210		\$67,817	\$0	\$0	\$0	\$0	\$67,917

DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action
Phase II Construction**
Project Location: **INTEC**
Estimate Number: **2960-B**

Client: **J. C. Hursf**
Prepared By: **J. C. Grenz**
Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9102.01 Grade Surface for Pavement												
00E0930	Case 590 Loader/Hoe	GEN	<i>U.C. per hr</i>		1		<i>0</i>	<i>28.68</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>26.68</i>
			120.00	hr	120	00E0930	\$0	\$3,442	\$0	\$0	\$0	\$3,442
00E2010	12 cy End Dump	GEN	<i>U.C. per hr</i>		1		<i>0</i>	<i>31.45</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>31.45</i>
			120.00	hr	120	00E2010	\$0	\$3,774	\$0	\$0	\$0	\$3,774
CN-EQMD	Equipment Operators, Medium Equipment	GEN	<i>U.C. per hr</i>		1	\$34.75	<i>34.75</i>	<i>0</i>	<i>0</i>	<i>a</i>	<i>0</i>	<i>34.75</i>
			120.00	hr	120	CN-EQMD	\$4,170	\$0	\$0	\$0	\$0	\$4,170
CN-TRHV	Truck Drivers. Heavy	GEN	<i>U.C. per hr</i>		1	533.48	<i>33.48</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>33.48</i>
			120.W	hr	120	CN-TRHV	\$4,018	\$0	\$0	\$0	\$0	\$4,018
CN-LABE	LABORER EXCAVATION. BACKFILL. FOUNDATIONS. TRENCHES	GEN	<i>U.C. per hr</i>		4	\$32.44	<i>129.76</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>129.76</i>
			120.00	hr	480	CN-LABE	\$15,571	\$0	\$0	\$0	\$0	\$15,571
Subtotal							\$23,759	\$7,218	\$0	\$0	\$0	\$30,974
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$6,897	\$2,095	\$0	\$0	\$0	\$8,992
Subtotal Estimate							\$0	\$0	\$0	\$0	\$0	\$39,966
Escalation							\$8,131	\$1,862	\$0	\$0	\$0	\$0
Continuancv												\$7,993
---Total 9102.01 Grade Surface for Pavement					720		\$36,787	511,172	\$0	\$0	\$0	\$47,960

9102.02 Pave Over Tanks

	DIRT	U.C. per sf	0.003	\$34.75	0.704	0.07	0.35	0	0	0.524
Place Pavement		11,800.00 sf	35	CN-EQMD	\$1,230	\$826	\$4,130	\$0	\$0	\$6.186

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax
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DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action
Phase II Construction**
Project Location: **INTEC**
Estimate Number: **2960-B**

Client: **J. C. Hursf**
Prepared By: **J. C. Grenz**
Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>9102.02 Pave Over Tanks</u>												
	Add Pavement at Pipes	DIRT		<i>U.C. per sf</i>		<i>534.75</i>	<i>3.475</i>	<i>15</i>	<i>0.55</i>	<i>0</i>	<i>0</i>	<i>19.025</i>
			300.00	sf	30	CN-ECIMD	\$1,043	\$4,500	\$165	\$0	\$0	\$5,708
Subtotal							\$2,273	\$5,326	\$4,295	\$0	\$0	\$11,894
Sales Tax							\$0	\$0	\$258	\$0	\$0	\$258
INEEL/Subcontractor Overheads							\$953	\$2,233	\$1,909	\$0	\$0	\$5,095
Subtotal Estimate												\$17,247
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$645	\$1,512	\$1,292	\$0	\$0	\$3,449
---Total 9102.02 Pave Over Tanks					65		\$3,871	\$9,071	\$7,754	\$0	\$0	\$20,696

9102.03 Pave on Slope

	Place Pavement	DIRT		<i>U.C. per sf</i>		<i>534.75</i>	<i>3.475</i>	<i>0.07</i>	<i>0.35</i>	<i>0</i>	<i>0</i>	<i>0.524</i>
			4,500.00	sf	14	CN-ECIMD	\$469	\$315	\$1,575	\$0	\$0	\$2,359
	Add Pavement at Pipes	DIRT		<i>U.C. per sf</i>		<i>534.75</i>	<i>3.475</i>	<i>15</i>	<i>0.55</i>	<i>0</i>	<i>0</i>	<i>13.025</i>
			50.00	sf	5	CN-EQMD	\$174	\$750	\$28	\$0	\$0	\$951
	Add Equipment	DIRT		<i>U.C. per hr</i>			<i>0</i>	<i>43.83</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>43.83</i>
			10.00	hr	10	00E0940	\$0	\$438	\$0	\$0	\$0	\$438
Memo: This equipment is used to pull the paving equipment up and down the slope.												
Subtotal							\$643	\$1,503	\$1,603	\$0	\$0	\$3,749
Sales Tax							\$0	\$0	\$96	\$0	\$0	\$96
INEEL/Subcontractor Overheads							\$270	\$630	\$712	\$0	\$0	\$1,612
Subtotal Estimate												\$5,457
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$182	\$427	\$482	\$0	\$0	\$1,091
---Total 9102.03 Pave on Slope					19		\$1,095	\$2,560	\$2,893	\$0	\$0	\$6,548

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: **Tank Farm Interim Action**
Phase II Construction
 Project Location: **INTEC**
 Estimate Number: **2960-B**

Client: **J. C. Hursf**
 Prepared By: **J. C. Grenz**
 Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>9102.04 Excavate for Pipe</u>												
00E0930	Case 590 Loader/Hoe	GEN	<i>U.C. per hr</i>		1		0	28.68	0	0	0	28.68
			160.00	hr	160	00E0930	\$0	\$4,589	\$0	\$0	\$0	\$4,589
00E2010	12 cy End Dump	GEN	<i>U.C. per hr</i>		1		0	31.45	0	0	0	31.45
			160.00	hr	160	00E2010	\$0	\$5,032	\$0	\$0	\$0	\$5,032
CN-EQMD	Equipment Operators, Medium Equipment	GEN	<i>U.C. per hr</i>		1	\$34.75	34.75	0	0	0	0	34.75
			160.00	hr	160	CN-EQMD	\$5,560	\$0	\$0	\$0	\$0	\$5,560
CN-TRHV	Truck Drivers, Heavy	GEN	<i>U.C. per hr</i>		1	\$33.48	33.48	0	0	0	0	33.48
			160.00	hr	160	CN-TRHV	\$5,357	\$0	\$0	\$0	\$0	\$5,357
CN-LABE	LABORER EXCAVATION, BACKFILL, FOUNDATIONS, TRENCHES	GEN	<i>U.C. per hr</i>		4	\$32.44	129.76	0	0	0	0	129.76
			160.00	hr	840	CN-LABE	\$20,762	\$0	\$0	\$0	\$0	\$20,762
Subtotal							\$31,678	\$9,621	\$0	\$0	\$0	\$41,299
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$9,196	\$2,793	\$0	\$0	\$0	\$11,989
Subtotal Estimate												153,288
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$8,175	\$2,483	\$0	\$0	\$0	\$10,658
--Total 9102.04 Excavate for Pipe					960		\$49,050	\$14,896	\$0	\$0	\$0	\$63,946

9102.05 Install Pipes

6" CMP	GEN	<i>U.C. per lf</i>	70.00	lf	0.1	\$32.44	3.244	0	4	0	0	7.244
					7	CN-LABE	\$227	\$0	\$280	\$0	\$0	\$507
6" HOPE	GEN	<i>U.C. per lf</i>	1,000.00	lf	0.08	\$32.44	2.595	0	1.3	0	0	3.695
					80	CN-LABE	\$2,595	\$0	\$1,300	\$0	\$0	\$3,895
Couplers	GEN	<i>U.C. per ea</i>	7.00	ea	0.5	\$32.44	16.22	0	20	0	0	36.22
					4	CN-LABE	\$114	\$0	\$140	\$0	\$0	\$254

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax
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DETAIL ITEM REPORT

Project Name: **Bank Farm Interim Action**
Phase II Construction
 Project Location: **INTEC**
 Estimate Number: **2960-B**

Client: **J. C. Hurst**
 Prepared By: **J. C. Grenz**
 Estimate Type: **Planning**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>9102.05 Install Pipes</u>												
	Pipe Sock	GEN			1	532.44	32.44	0	50	0	0	82.44
			5.00	ea	5	CN-LABE	\$162	\$0	\$250	\$0	\$0	\$412
	Ballast Tube (GFE)	GEN			2	\$32.44	64.88	0	0	0	0	64.88
			1.00	ea	2	CN-LABE	\$65	\$0	\$0	\$0	\$0	\$65
Subtotal							\$3,163	\$0	\$1,970	\$0	\$0	\$5,133
Sales Tax							\$0	\$0	\$118	\$0	\$0	\$118
INEEL/Subcontractor Overheads							\$918	\$0	\$606	\$0	\$0	\$1,524
Subtotal Estimate												\$6,775
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$816	\$0	\$539	\$0	\$0	\$1,355
---Total 9102.05 Install Pipes					98		\$4,897	\$0	\$3,233	\$0	\$0	\$8,131

9310 CONSTRUCTION SUPPORT - RADTECH

U60	BBWI-A	U.C. per wk			20	\$51.32	1026.301	0	0	0	0	1026.301
	RADIOLOGICAL CONTROL TECH		15.00	wk	300	U60	\$15,395	\$0	\$0	\$0	\$0	\$15,395
Subtotal							\$15,395	\$0	\$0	\$0	\$0	\$15,395
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$1,755	\$0	\$0	\$0	\$0	\$1,755
Subtotal Estimate												\$17,149
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$3,430	\$0	\$0	\$0	\$0	\$3,430
--Total 9310 CONSTRUCTION SUPPORT - RADTECH					300		\$20,579	\$0	\$0	\$0	\$0	\$20,579

9400 CONSTRUCTION QUALITY CONTROL

Memo: first line *inspection activities performed during construction if done by BBWI personnel*. Includes *Material Lab, compaction*, and other tests *normally performed* by the company.

T02	BBWI-A	U.C. per wk			10	\$52.81	528.069	0	0	0	0	528.069
	CONST INSPECT TECH		15.00	wk	150	T02	\$7,921	\$0	\$0	\$0	\$0	\$7,921

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Estimating Department

Material Costs where applicable include Idaho State Sales Tax
Page No

DETAIL ITEM REPORT

Project Name: *Tank Farm interim Action
Phase II Construction*
Project Location: *INTEC*
Estimate Number: *2960-B*

Client: *J. C. Hurst*
Prepared By: *J. C. Grenz*
Estimate Type: *Planning*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
9400 CONSTRUCTION QUALITY CONTROL												
<i>Memo: First line inspection activities performed during construction if done by BBWI personnel. Includes Material Lab. compaction, and other tests normally performed by the company.</i>												
Subtotal							\$7,921	\$0	\$0	\$0	\$0	\$7,921
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads		11.40%					\$903	\$0	\$0	\$0	\$0	\$903
Subtotal Estimate							\$0	\$0	\$0	\$0	\$0	\$8,824
Escalation							\$1,765	\$0	\$0	\$0	\$0	\$0
Contingency												\$1,765
---Total 9400 CONSTRUCTION QUALITY CONTROL					150		\$10,589	\$0	\$0	\$0	\$0	\$10,589

Subtotal Tank Farm Phase II							\$333,644	\$23,666	\$7,868	\$0	\$40	\$365,227
Sales Tax							\$0	\$0	\$472	\$0	\$0	\$472
INEEL/Subcontractor Overheads							\$66,732	\$7,751	\$3,228	\$0	\$5	\$77,715
Subtotal Estimate							\$0	\$0	\$0	\$0	\$0	\$443,404
Escalation							\$77,182	\$6,283	\$2,313	\$0	\$7	\$0
Contingency												\$85,785
Total Tank Farm Phase II					5,874		\$477,557	\$37,700	\$13,881	\$0	\$5	\$529,189

Appendix K

Operation and Maintenance Plan for INTEC Operable Unit 3-13, Group I , Tank Farm Interim Action, Phases I and II (DOEAD-10771)

TO VIEW APPENDIX K SEE:

DOEKID-10771, REV.01

Appendix L

Waste Management Plan for INTEC Operable Unit 3-13, Group I , Tank Farm Interim Action, Phases I and II (DOE/ID-10770)

TO VIEW APPENDIX L SEE:

DOE/ID-10770, REV.03

Appendix M

Health and Safety Plan for Waste Area Group 3, Operable Unit 3-13, Group 1, Soils Tank Farm Interim Action (INEEL/EXT-2000-00194)

TO VIEW APPENDIX M SEE:
INEEL/EXT-2000-00194, REV.04

Appendix N

**Compilation of Changes to RD/RA WP and
Supporting Documents**

Compilation of Changes to Remedial Design/Remedial Action Work Plan for Tank Farm Interim Action, Phases I and II and Supporting Documents

Item	Section/Page No.	Description	Justification
Remedial Design/Remedial Action Work Plan for Group 1 Tank Farm Interim Action (DOE/ID 10772)			
1	Cover page	Updated revision number and publish date	Updated for document control
2	Title page	Updated revision number and publish date	Updated for document control
3	Abstract	Inserted text to note remedial design changed due to Notice of Violation	NOV Agreement reached between IDEQ, EPA, and NE-ID changed remedial design scope of work
4	Foreword	Inserted to provide basis for revising document	Provides basis for revising document
5	Contents	Updated section numbers and appendices for agreement with revised document	Document revision
6	Acronyms	Added NOV to list	NOV used in revised document
7	Pg. 1-1/Section 1	Inserted text to note remedial design changed due to Notice of Violation	NOV Agreement reached between IDEQ, EPA, and NE-ID changed remedial design scope of work
8	Pg. 1-3/Fig. 1-2	Modified figure to reflect change in project scope (i.e. removed reference to spray-on liner and redrew boundaries of soil covering)	Change in remedial design scope of work as defined in NOV Agreement reached between IDEQ, EPA, and NE-ID
9	Pg. 1-41 Section 1.2	Redefined area to receive impermeable cover to CPP-28,-31, and -79.	Supports description of scope of work
10	Pg. 1-41 Section 1.3	Redefined area to receive impermeable cover to CPP-28,-31, and -79 and listed document appendices	Supports description of scope of work
11	Pg. 1-6/Fig. 1-3	Added new figure to show select locations for soil covers.	Supports description of scope of work
12	Pg. 2-11 Section 2.0	Redefined area to receive impermeable cover to CPP-28,-31, and -79, described type of soil cover material, and inserted reference to new figure.	Supports description of work scope and new remedial design.
13	Pg. 2-11 Section 2.1	Redefined area to receive impermeable cover to CPP-28,-31, and -79, described type of soil cover material, and inserted reference to new figure	Supports description of work scope and new remedial design.
14	Pg. 2-11 Section 2.1.1	Redefined area to receive impermeable cover to CPP-28,-31, and -79 and updated references to appendices.	Supports description of work scope.
15	Pg. 2-21 Section 2.1.2	Redefined area to receive impermeable cover to CPP-28,-31, and -79.	Supports description of work scope.
16	Pg. 2-31 Section 2.1.3	Redefined area to receive impermeable cover to CPP-28,-31, and -79, described type of soil cover material, and added reference to new Engineering Design File. Removed text referring to original scope of work.	Supports description of work scope and new remedial design.
17	Pg. 2-41 Section 2-2	Added reference of NOV Agreement.	Referenced in revised document
18	Pg. 2-5/Table 2-1	Inserted references to appendices for Operations and Maintenance Plan and Health and Safety Plan.	Provide locations of documents.

Item	Section/Page NO	Description	Justification
Remedial Design/Remedial Action Work Plan for Group 1 Tank Farm Interim Action (DOE/ID 10772) (continued)			
19	Pg. 2-6/Table 2-1	Inserted reference to appendix for Waste Management Plan and redefined soil cover as asphalt	Provide location of referenced document and support description of remedial design.
20	Pg. 2-7/Table 2-1	Inserted references to appendices for Waste Management Plan and Health and Safety Plan.	Provide locations of documents.
21	Pg. 2.9/ Section 2.6	Text inserted to describe revised scope of work inside the Tank Farm fence.	Supports description of work scope and new remedial design.
22	Pg. 2.9/ Section 2.7	Removed reference to ACMM 3994, an outdated document number and procedure, and replaced the soil cover description with asphalt.	Outdated procedure and soil cover description is consistent with revised design.
23	Pg. 2-10/ Section 2.7.3	Removed option of using poly-urea spray on coating for soil cover.	Soil cover description is consistent with revised design.
24	Pg. 2-11/ Section 2.7.3	Removed option of using poly-urea spray on coating for soil cover and revised scope of asphalt covering inside the Tank Farm to CPP-28,-31, and -79.	Soil cover description and area of application is consistent with revised design.
25	Pg. 2-11/ Section 2.10	Text updated to show completion of work to C-40 valve box.	Work completed.
26	Pg. 3-11 Section 3.0	Reference to EDF for justifying asphalt as the soil cover inserted. Removed reference to Appendix O.	Soil cover description is consistent with revised design
27	Pg. 3-11 Section 3.1	Added reference to new figure (Fig. 1-3) and clarified text describing problem with patching existing liner.	Clarifies location of field work and problem with existing liner.
28	Pg. 3-41 Section 3-4	Removed pond sump details.	Design of pond sump changed from original design.
29	Pg. 3-51 Section 3.4	Updated description of areas to be covered with asphalt and removed discussion of poly-urea spray on coating.	Soil cover description and area of application is consistent with revised design.
30	Pg. 4-11 Section 4.1	Divided design into two phases and describes the scope of each phase.	Consistency with NOV Agreement and to reflect work completed.
31	Pg. 4-11 Section 4.2	Text added for describing process for bidding Phase I and II work separately and awarding contracts.	Revised document divides the remedial action into two phases.
32	Pg. 4-31 Section 4.3.5	Updated description of areas to be covered with asphalt, removed discussion of poly-urea spray on coating, and added reference to new figure (Fig. 1-3).	Soil cover description and area of application is consistent with revised design. Clarifies location of field work.
33	Pg. 4-31 Section 4.3.7	Added references to construction specifications located in appendices.	New appendices added
34	Pg. 4-31 Section 4.3.8	Added reference to HASP in appendices.	Provides location to find document
35	Pg. 4-31 Section 4.3.9	Added references to construction specifications located in appendices	New appendices added.
36	Pg. 4-41 Section 4.5	Added reference to HASP located in appendices.	Provides location to find document
37	Pg. 4-51 Section 4.5	Added reference to HASP located in appendices.	Provides location to find document
38	Pg. 4-51 Section 4.6	Cost estimate updated to reflect division of work and remainder of work.	Shows remainder of cost for completion of remedial design

Item	Section/Page No	Description	Justification
Remedial Design/Remedial Action Work Plan for Group 1 Tank Farm Interim Action (DOE/ID 10772) (continued)			
39	Pg. 4-5/ Section 4.7	Project schedule updated to reflect division of work and schedule for deliverables. Added references to schedules located in appendices.	Updated to describe division of work and schedule for deliverables
40	Pg. 4-7/ Section 4.10	Changed date in citation for Waste Management Plan and added reference to WMP located in appendices	New date refers to latest revision of WMP
41	Pg. 4-7/ Section 4.11	Changed date in citation for Operation and Maintenance Plan and added reference to O&M Plan located in appendices	New date refers to latest revision of O&M Plan
42	Pg. 4-7/ Section 4.12	Changed date in citation for Waste Management Plan and added reference to WMP located in appendices	New date refers to latest revision of WMP
43	Pg. 4-81 Section 4.13	Changed date in citation for Health and Safety Plan and added reference to HASP located in appendices	New date refers to latest revision of HASP
44	References	Updated accordingly for documents added or removed	Document control
Appendix D-1– OU 3-13 Group 1, Tank Farm Interim Action, Soil Cover Justification (EDF–3824)			
45		New document, replaces EDF-ER-115	Soil cover justification.
Appendix E-1 – Construction Specification (SPC-269)			
		Original construction specification, replaced by SPC-458 and -472	Revised per NOV amendments to scope.
Appendix E-2 – Construction Specification (SPC-458), partial replacement of SPC-269			
48	Contents	Both Divisions and sub-divisions of work reduced	Revised scope of work and reflects completed work.
49	Section 010051 Pg. 1	Added task of installing 15kV cable	New scope
50	Section 01051/ Pg. 2	Grade finish stakes layout reduced to 25 ft from 50 ft. Requirement for placement of subbase stakes reduced to 0.01 ft of final grade from 0.2 ft.	Updated specification
51	Section 013001 Pg. 7	Added requirement to submit layout drawings, spare parts lists, and calculations	Updated specification
52	Section 020621 Pg. 2	Removed reference to clearing and grubbing	Work completed
53	Section 02430	Section removed.	Work completed
54	Section 02444	Section removed	Work completed
55	Section 02486	Section removed	Work completed
56	Section 02514	Replaced with Section 02742 of SPC-458. Revised asphalt specification, quality control testing, required submittals, and compaction requirement reduced to 92% density from 95%.	Updated specification
57	Section 025981 Pg. 3	Non-woven geotextile specification revised. Additional requirements added for delivery storage and handling of liner materials, installation of liner materials (i.e. wind and nuisance dirt precautions), and non-destructive testing.	Updated specification
58	Section 03301	Added requirement for expansion joint and requires red concrete to be used for all duct banks, added conditions for equipment bases and foundations, and details for finishing and curing concrete.	Updated specification
59	Section 03400	Removed specifications for pre-cast concrete	Work completed

Item	Section/Page NO.	Description	Justification
Appendix E-2 – Construction Specification (SPC-458), partial replacement of SPC-269 (continued)			
60	Section 09810	Section removed	Polyurea spray-on replaced with asphalt.
61	Section 15401	Revised section to combine work contained in 15401, 15480, and 15481. Section 15401 of SPC-458 added requirement to submit Butt fusion procedure, personnel qualifications, Operation and Maintenance Manuals for flow totalizer, pump, and calibration data for totalizer; added specifications for PVC components, polyethylene pipe, back-up rings, bolts, gaskets, vacuum breaker, sample valve, and for installation of joints, pipelines, pump, and controls. Section 15600 added to SPC-458 to provide greater detail for testing piping and pump, which was contained in Section 15181 of SPC-269.	Updated specification
62	Section 15480	Removed – see item 61	Updated specification
63	Section 15481	Removed – see item 61	Updated specification
64	Section 16000	Summary of work revised to reflect work completed in 2001 and 15kV cable to install.	New work scope
65	Section 16109	Original specification called for installation of weld receptacles. Revised specification calls for installation of heavy-duty duplex wall receptacles for 20 ampere service.	New work scope
66	Section 16124	New section	Updated specification
67	Section 16360	New section	Updated specification
68	Section 16370	Section removed	Updated specification
Appendix E-3 – Construction Specification (SPC-472), partial replacement of SPC-269			
69	Section 01005	Replaced polyurea spray on coating with asphalt and added installation of storm water drainpipe.	New work scope
70	Section 01051	Added requirement to submit as-built survey data and grade control plan.	Updated specification
71	Section 02200	Added load restrictions for work on Tank Farm. Replaced polyurea with asphalt cover.	New work scope
72		Added requirement to submit layout drawings, spare parts lists, and calculations	Updated specification
73	Section 02430	Added use of HDPE storm water drain pipe	New work scope
74	Section 02576	New section for pavement sealing	New work scope
75	Section 02741	New section for plant mix pavement requiring submittal of Paving Plan and establishes a compaction density of 90%. Cost of field quality control testing to be covered by subcontractor	Updated specification
76	Schedule "X"	HDPE ballast tubes to be supplied by Government at no cost to contractor	New work scope
Appendix F-1 – Design Drawings (SPC-269)			
77		Original design drawings, replaced by SPC-458 and -472	Revised per NOV amendments to scope
Appendix F-2 – Design Drawings (SPC-458), partial replacement of SPC-269			
78	Dwg. 623728	Updated dwg. 515157, site plan for field work	Document control
79	Dwg. 623729	Updated dwg. 515158, drawing index	Document control
80	Dwg. 623730	Replaces 515159, no changes to body of drawing	Document control
81	Dwg. 623731	Replaces 515160 and shows completed and uncompleted work for Phase I.	Revised scope per NOV amendments

Item	Section/Page No.	Description	Justification
Appendix F-2 – Design Drawings (SPC-458), partial replacement of SPC-269 (continued)			
82	Dwg. 623732	Replaces 515164 and shows completed and uncompleted work for Phase I.	Revised scope per NOV amendments
83	Dwg. 623733	Replaces 515162 and shows changed in alignment 2 to Type 2A ditch design and calls for removal of existing asphalt sidewalk and pad.	Revised scope per NOV amendments
84	Dwg. 623734	Replaces 515166 and incorporates 2001 as-builts and provides details for constructing ditch along existing manhole.	Revised scope per NOV amendments
85	Dwg. 623735	Replaces 515167 and incorporates 2001 as-builts and reflects change in scope for Phase 1.	Revised scope per NOV amendments
86	Dwg. 623736	Replaces 515162 and reflects change in Phase I scope	Revised scope per NOV amendments
87	Dwg. 623737	Replaces 515168 and incorporates 2001 as-builts	Revised scope per NOV amendments
88	Dwg. 623738	Replaces 515171, incorporates 2001 as-builts, and reflects revised Phase I scope	Revised scope per NOV amendments
89	Dwg. 623739	Replaces 515172 and changes ditch type to Type 2 and 2A	Revised scope per NOV amendments
90	Dwg. 623740	Replaces 515173, , incorporates 2001 as-builts, and reflects revised Phase I scope	Revised scope per NOV amendments
91	Dwg. 623741	Replaces 515175, specifies Type 1 and 2 ditches, incorporates 2001 as-builts, and reflects revised Phase I scope. Dwg. 515175 specified Type 1.	Revised scope per NOV amendments
92	Dwg. 623742	Replaces 515176, incorporates 2001 as-builts, and reflects revised Phase I scope	Revised scope per NOV amendments
93	Dwg. 623743	Replaces 515177, incorporates 2001 as-builts, and reflects revised Phase I scope	Revised scope per NOV amendments
94	Dwg. 623744	Replaces 515192 and specifies new design for Type 2 ditch and introduces Type 2A ditch.	Revised scope per NOV amendments
95	Dwg. 623745	Replaces 515193 and revised height of concrete above pipes in head and end walls	Revised scope per NOV amendments
96	Dwg. 623747	Replaces 515198 and modifies headwall design	Revised scope per NOV amendments
97	Dwg. 623748	Replaces 515203 and provides added detail for rip-rap installation	Revised scope per NOV amendments
98	Dwg. 623750	Replaces 515179 and modifies elevation of leak collection sumn.	Revised scope per NOV amendments
99	Dwg. 623751	Replaces 515180, shows layout plan for ballast, incorporates 2001 as-builts, provides ballast bag detail, and modifies liner anchor details	Revised scope per NOV amendments
100	Dwg. 623752	Replaces 515181, shows details for anchoring secondary liner at bottom of pond, modifies liner anchoring at top of berm, and shows details for ballast.	Revised scope per NOV amendments
101	Dwg 623753	Replaces 515182 and modifies evaporation pond sump dimensions	Revised scope per NOV amendments
102	Dwg. 623754	Replaces 515183 and modifies electrical mounting rack base and sump pump pipe	Revised scope per NOV amendments
103	Dwg. 623755	Replaces 515191 and reflects Phase I scope of work	Revised scope per NOV amendments Revised scope per NOV amendments

Item	Section/Page No.	Description	Justification
104	Dwg. 623756	Replaces 515188 and modifies typical asphalt concrete detail and replaced polyurea with asphalt on portion of alignment 4	Revised scope per NOV amendments
105	Dwg. 623757	New drawing	Revised scope per NOV amendments
106	Dwg. 623758	New drawing	Revised scope per NOV amendments
107	Dwg. 623759	Replaces 515217	Revised scope per NOV amendments
108	Dwg. 623760	Replaces 515216	Revised scope per NOV amendments
109	Dwg. 623761	Replaces 515219	Revised scope per NOV amendments
110	Dwg. 623762	Replaces 515218	Revised scope per NOV amendments
111	Dwg. 623763	New drawing	Revised scope per NOV amendments
112	Dwg. 623764	New drawing	Revised scope per NOV amendments
113	Dwg. 623765	New drawing	Revised scope per NOV amendments
114	Dwg. 185249	Added to specification package for reference	Document control
Appendix F-3 – Design Drawings (SPC-472), partial replacement of SPC-269			
115	Dwg. 624400	New drawing, Site view and drawing index	Revised scope per NOV amendments
116	Dwg. 624401	New drawing, Drainage routing plan	Revised scope per NOV amendments
117	Dwg. 624402	New drawing, Paving plan, CPP-31	Revised scope per NOV amendments
118	Dwg. 624403	New drawing, Paving plan, CPP-28 and -79	Revised scope per NOV amendments
119	Dwg. 624404	New drawing, Detail and sections of asphalt cover	Revised scope per NOV amendments
Appendix H-1 – Construction Schedule (from RD/RA WP Rev. 0)			
120		Replaced with new construction schedules for Phase I and II	Outdated schedule
Appendix H-2 – Revised Phase I and II Construction Schedules			
121		Replaces original construction schedule	New schedule
Appendix J-1 – Detailed Cost Estimate (from RD/RA WP Rev. 0)			
122		Replaced by detailed cost estimates for Phase I and II	Outdated costs
Appendix J-2 – Revised Phase I Detailed Cost Estimate			
122		Cost estimate to complete Phase I	New cost estimate
Appendix J-3 – Revised Phase II Detailed Cost Estimate			
123		Cost estimate to complete Phase II	New cost estimate

Item	Section/Page NO.	Description	Justification
Appendix K – Operations and Maintenance Plan (DOE/ID-10771)			
124		Originally this appendix was for Other Procedures Relevant to the RA but has been replaced by O&M Plan	
125	Cover	Undated revision number and publish date and revised title	Document control
126	Title	Updated revision number and publish date and revised title	Document control
127	Abstract	Inserted reference to Notice of Violation affecting scope of remedial design	NOV modified remedial design
128	Contents	Removed Evaporation Pond Design document from appendix.	Document can be found in appendix of RD/RA Work Plan
129	Acronyms	Removed ECA, added NOV	Document control
130	Pg. 1-1/Section 1	Revised scope of work as amended by NOV and replaced poly-urea soil liner with asphalt	To make consistent with current scope
131	Pg. 2-1/Section 2	Inserted reference to Notice of Violation affecting scope of remedial design and updated list of interim activities to identify ones completed and ones to finish	To make consistent with current scope
132	Pg. 2-1/Section 2	Revised scope of work as amended by NOV and replaced poly-urea soil liner with asphalt	To make consistent with current scope
133	Pg. 2-5/Section 2	Added new figure to show select areas to be asphalt paved.	Supports description of scope of work
134	Pg. 3-1/Section 3	Added “Monitoring” to section heading and statement describing O&M Plan will be revised after completion of remedial action.	Reflects monitoring portion of section and need for updating Plan after further knowledge of the design is known.
135	Pg. 3-11 Section 3-1	Removed reference to poly-urea coating and added content describing inspection and maintenance of asphalt and radiological monitoring.	Asphalt replaced poly-urea coating
136	Pg. 3-11 Section 3-2	Added requirement to perform routine radiological surveys of ditches and culverts	RadCon suggestion
137	Pg. 3-21 Section 3-2	Added requirement to perform radiological surveys of ditches and culverts after precipitation events	RadCon suggestion
138	Pg. 3-31 Section 3-2	Table updated with requirements to perform radiological surveys of surface-sealed areas, ditches, and culverts and to perform inspections of the evaporation pond for sediment and debris build-up.	To make consistent with main body text
139	Pg. 3-31 Section 3.3	Lift station inspection and maintenance activities clarified and expanded	Incorporate all relevant inspection and maintenance information
140	Pg. 3-41 Section 3.4	Changed reference to Evaporation Pond Design document.	Document can be found in appendix of RD/RA Work Plan
141	Pg. 3-41 Section 3.4.3	Added items to list for inspection of sediment and clarified description of process for removal and management of sediments from structures	Clarifies maintenance actions
142	Pg. 3-51 Section 3.4.3	Added requirement to perform a waste determination of sediments following analysis.	To be used for proper management of waste.
143	Pg. 4-11 Section 4	Changed annual O&M reporting and content of reports.	Content of report changed to include all relevant information
144	Pg. 5-11 Section 5.2	Revised responsibilities of contractor project manager	To make consistent with latest role of contractor project manager

Item	Section/Page No.	Description	Justification
145	Pg. 5-1/ Section 5.3	Added project engineer or site operations manager to list of responsible individuals for the O&M Plan	Accountability for Plan
146	Reference	Added reference for Notice of Violation	Document control
Appendix L – Waste Management Plan (DOE/ID-10770)			
147		The WMP was revised to contain the requirements for characterizing wastes.	Expanded scope of WMP
148	Cover	Updated revision number, publish date, and revised title	Document control
149	Title	Updated revision number, publish date, and revised title	Document control
150	Abstract	Expanded scope of Plan to also cover Phase II	One project, TFIA
151	Acronyms	Updated list for changes in document	Document control
152	Pg. 1-1/Section 1	Clarified objective and expanded on scope of activities covered by Plan	Incorporation of Phase II
153	Pg. 1-1/ Section 1.1	New section	Clarifies purpose and objectives
154	Pg. 2-1/Section 2	Minor edit of sentence	Consistency with new scope
155	Pg. 2-3/Fig. 2-2	Minor edit of caption	Consistency with new scope
156	Pg. 2-4/Fig. 2-3	New figure showing areas inside Tank Farm to be covered in Phase II	Narrowed scope for Tank Farm
157	Pg. 3-1/Section 3	Changed section heading and revised text to agree with new table of potential wastes	Consistency with new scope
158	Pg. 3-1/ Section 3.1	Removed	Unnecessary text
159	Pg. 3-1/ Section 3.2	Removed	Unnecessary text
160	Pg. 3-2/Table 3-1	New Table, replaced table with estimated volumes of wastes	Waste volumes not consistent with new scope of work
161	Pg. 4-1/Section 4	New section for waste characterization	Waste characterization
162	Pa. 5-1/Section 5	New section for sampling wastes	Waste characterization
163	Pg. 6-1/Section 6	New section for waste characterization design basis	Waste characterization
164	Pg. 7-1/Section 7	New section for identifying and labeling samples for characterization	Waste characterization
165	Pg. 8-1/Section 8	New section for describing sampling procedure	Waste characterization
166	Pg. 9-1/Section 9	New section for documenting samples, identifying sampling equipment, sample containers, preservatives, and transportation	Waste characterization
167	Pg. 10-1/ Section 10 to Section 10.3.6	Replaces section 4 of original WMP. Section content completely revised.	Consistency with new scope of field work
168	Pg. 11-1/ Section 11	New section for management and disposition of wastes	Added requirements for management and disposition of wastes
169	Pg. 12-1/ Section 12	New section for tracking, reporting, and record keeping for wastes	
170	References	Added and removed references as necessary	Document control
171	Appendix A	Appendix added for Sampling and Analysis Plan Table	Requirement for sample analysis and management
Appendix M – Health and Safety Plan (INEEL/Ext-2000-00194)			
172		Replaces Waste Management Plan that was moved to Appendix L. No changes to HASP document.	

Item	Section/Page No.	Description	Justification
Appendix N – List of Changes to RD/RA WP Package			
173		Replaces HASP that was moved to Appendix M and is new appendix comprised of a list of changes to RD/RA WP and associated documents.	
Appendix O – Polyurea Demonstration Report			
174		Deleted appendix in response to change in soil covering.	

**Documentation of Agreement to Modify Phase I
of the
Tank Farm Interim Action**



Department of Energy

Idaho Operations Office
850 Energy Drive
Idaho Falls, Idaho 83401-1563

June 9, 2003

Mr. Wayne Pierre, Team Leader
Environmental Cleanup Office
U.S. Environmental Protection Agency
Region X
1200 Sixth Avenue
Seattle, Washington 98101

Mr. Dean Nygard, Site Remediation Manager
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

SUBJECT Documentation of Agreement to Modify Phase I of the Tank Farm Interim
Action - (EM-ER-03-140)

Dear Mr. Pierre and Mr. Nygard:

This letter is to document the agreement that was reached during the Waste Area Group 3 agency conference call on March 20, 2003. During this conference call, it was determined that some of the areas outside the Tank Farm fence that were originally shown in the Remedial Design/Remedial Action (RD/RA) Work Plan for Group 1 Tank Farm Interim Action (DOWID-10772) as being covered with pavement or polyurea will not need the covering. The Agreement to Resolve Dispute (OCC-03-025) does not require the entire Tank Farm surface inside the fence be covered. It is reasonable to assume that some areas outside of the Tank Farm fence also do not need to be covered. Surface water infiltration will not be diverted to these areas. Some of these areas are small and do not impact the overall reduction of infiltration. Some of those areas simply cannot be covered.

The enclosed drawings show the areas surrounding the Tank Farm and the corresponding storm water drainage system to the evaporation pond. The shaded and solid blue areas correspond to ditches, paving, and other activities that were previously completed. The green areas indicate ditches, paving, and other activities that will be completed this year. The shaded red areas are those that will not be covered under the agreement reached on March 20th. Each of the red areas is numbered on the figure and described below. However, some of Areas 1 and 5 will be paved.

Area 1: This area consists of a steep berm around the CPP-701 fuel storage tanks. A small area on the north side of the berm will be paved. This paved area will be approximately 10-ft wide and connects to the existing paved ditch.

Area 2: This area is fairly flat and is located on the west side of Beech St. A large generator is permanently installed in this area that is hard wired into CPP-606. In addition, this area congested with numerous interferences.

Pierre, Nygard

-2-

Area 3: This area consists of a small strip between the Tank Farm fence and the ditch running north along Beech St. This area will not be paved because it is impractical to grade and pave this area when the adjacent area inside the Tank Farm fence is not being covered.

Area 4: This is a small flat area southeast of the Tank Farm on the west side of Beech St. Due to the high slope, drainage from this area would be directed into a large unpaved area to the west.

Area 5: This area is directly south of the Tank Farm, the stack, and CPP-605. The area around the stack will be paved where it is advantageous to sloping to the ditch that will be installed. Any area that would promote drainage to the existing buildings or inside the tank farm fence will not be paved. Most of this area lies in a low spot and during the call, a question was raised concerning storm water runoff near an emergency exit next to one of the buildings. The building operations personnel were contacted and it was determined that no water infiltration into the building occurred at the entry way in question.

Area 6: This area consists of a steep berm around two storage tanks. Paving this area is not feasible due to these obstructions.

Area 7: The south portion of this area is on a steep berm and the north portion also contains a smaller, but steep berm. Paving these berms is not feasible.

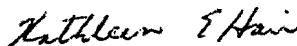
Area 8: This area consists of planter boxes with landscape fabric and gravel around CPP-699. Paving this area and installing the section of ditch along the west side of the building will require removal of the existing sidewalk and modification of the west entrance to the building. The ditch was originally intended to collect flow off of the east side of the Tank Farm, since this area of the tank farm is not being covered, installation of the ditch will provide no additional benefit.

Area 9: This area is just north of the Tank Farm around the existing concrete pad and an office trailer. The ditch and paving in this area will not be completed because these areas are currently being used as materials storage and mockup areas by the Tank Farm closure project.

The remedial action objectives for the Tank Farm interim action will not be changed by these modifications and the cover installed will meet the requirements of the OU 3-13 Record of Decision (DOE/ID-10660). These modifications, and those for Phase II, will be included in the revised RD/RA Work Plan, which will be sent to you in August 2003.

If you have questions or need additional information, please contact Rachel Hall at (208)526-1661.

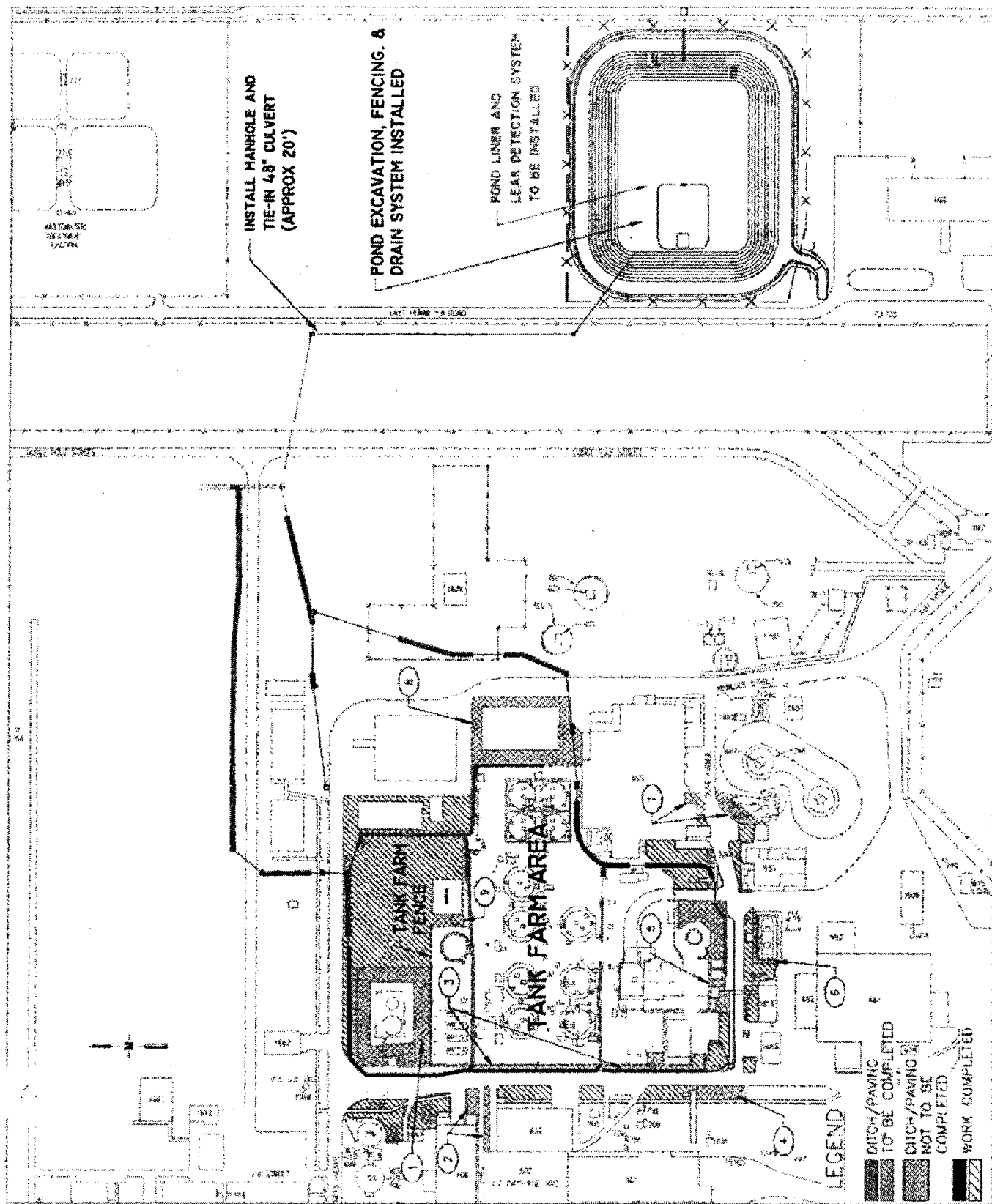
Sincerely,



Kathleen E. Hain, Lead
Environmental Restoration Program

Enclosure

cc: M. English, IDHW, DEQ, 1410 N. Hilton, Boise, ID 83706
D. Koch, IDHW, DEQ, 1410 N. Hilton, Boise, ID 83706
T. Kluk, DOE-HQ, EM-441
R. Cummings, DOE-HQ, EM 441



**Final Original Copy of Agreement to Resolve Dispute
Waste Area Group 3, Operable Unit 3-13**



Department of Energy

Idaho Operations Office
850 Energy Drive
Idaho Falls, Idaho 83401-1563

COPY

March 4, 2003

Mr. Darrell G. Early,
Deputy Attorney General
Office of the Attorney General State of Idaho
1410 N. Hilton, Second Floor
Boise, Idaho 83706

Ms. Cyndy Mackey
Assistant Regional Counsel
Environmental Protection Agency
Mail Stop ORC - 58
EPA Region 10
1200 6th Avenue
Seattle, WA 98101

SUBJECT: Final Original Copy of Agreement to Resolve Dispute Waste Area Group 3,
Operable Unit 3-13 - OCC-03-025

Dear Mr. Early and Ms. Mackey:

Enclosed is your fully executed original copy of the Agreement to Resolve Dispute, effective February 21, 2003. Thank-you for your cooperation and assistance in bringing this matter to a prompt resolution.

Sincerely,

Brett R. Bowhan
Deputy Chief Counsel

Enclosure

cc: Orville Green, IDEQ, w/o enc.
Michael Gearheard, EPA Region 10, w/o enc.
Ann Williamson, EPA Region 10, w/o enc.

OCC-03-025
March 4, 2003

EXTERNAL bcc DISTRIBUTION:

Ray Swenson, BBWI, MS-3940, w/enc.
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R. Stallman, MS-1203, w/o enc.
L. Green, MS-1222, w/o enc.

CONCURRENCE:

RECORD NOTES:

1. This letter was written to distribute the Final Original Copy of Agreement to Resolve Dispute Waste Area Group 3, Operable Unit 313.
2. This letter was written by B. Bowhan
3. This letter/memo does OATS number N/A
4. The attached correspondence has no relation to the Naval Nuclear Propulsion Program.

BRBowhan, OCC, Iripps, 6-0276, March 4, 2003, O:\Division\occ\letterlog\03-025

IN THE MATTER OF:

AGREEMENT TO RESOLVE DISPUTE

**THE U.S. DEPARTMENT OF ENERGY
IDAHO NATIONAL ENGINEERING AND
ENVIRONMENTAL LABORATORY,
IDAHO FALLS, IDAHO.**

1.1 This "Agreement to Resolve Dispute" (Agreement) is a settlement of a dispute arising under the 1991 Federal Facility Agreement and Consent Order (FFA/CO) at the Idaho National Engineering and Environmental Laboratory (INEEL) related to the Notice of Violation (NOV) issued by the Environmental Protection Agency, Region 10 (EPA) dated December 4, 2002. The parties to this Agreement (the parties) are the U.S. Environmental Protection Agency (EPA), the Idaho Department of Environmental Quality (IDEQ) and the U.S. Department of Energy (DOE).

1.3 The parties have resolved all **allegations** in the NOV and **this** dispute by agreement, **which includes:** (1) payment of **a** stipulated **penalty** in the mount of \$175,000, (2) revised milestones **and** scope for the **Tank Farm Soil Interim Action (Interim Action)**; (3) revision of the Record of Decision (**ROD**) for OU 3-13 through an **Explanation of Significant Differences (ESD)**; and (4) **an** option for **DOE**, in collaboration **with** the **EPA** and **IDEQ**, to evaluate **and** accelerate the determination and implementation of the permanent remedy for the **Tank Fann Soil**, or in the alternative, to implement the **remaining portions of the Tank Fann Soil Interim Action** by installing **an** infiltration **barrier** over the remaining areas in the **tank farm** in stages **as** the tanks are closed.

1.4.1 The **flux** of radionuclide contamination migrating to the groundwater is expected to be significantly reduced. The remedial **action** objective **was** to

reduce **the** overall infiltration of precipitation in the tank farm by approximately 80% in order to minimize the **flux** of contaminants to the groundwater (DOE/ID-10660, OU 3-13 Record of Decision Declaration, Page IV). Completing the interim action **as** modified by **this** Agreement is expected to reduce recharge to the perched water in **the** area by over 99% of the estimated contamination released to the **soil** in the **Tank Farm**. By placing infiltration barriers over these hot spots, **the** infiltration of precipitation through the contaminated **soil** and the resultant contaminant **flux** is expected to be reduced significantly, **which** may surpass in achievement the intent of the **interim** action to minimize contaminant migration to the **aquifer**.

1.4.2 The **overall risk** reduction in the **Tank Farm** may be accelerated. DOE believes **this** approach continues to support DOE's **desire** to address the **risk** associated with the **tank liquids on an** accelerated schedule **as** established in the "Environmental Management Performance Management Plan for Accelerating Cleanup of the INEEL" in parallel with reducing the **risks from** the contaminated soils. Therefore, the overall **risk** associated with the tank farm may be **addressed** earlier **than** previously planned. **This** approach **also** facilitates the DOE, EPA, and IDEQ joint efforts to **work** towards acceleration of a **final** remedy.

1.5 **This** Agreement is limited to the dispute arising from the December 4, 2002 NOV. Nothing **in this Agreement** shall be construed to affect or relate to any other operable unit except **as** specifically provided herein, **Nothing** herein shall be construed to imply prior approval of any remedy to be selected for OU 3-14.

2. BACKGROUND

2.1 On December 9, 1991, **EPA, IDEQ and DOE** entered into the FFA/CO for the investigation and cleanup of INEEL. The **FFNCO** was entered **into** pursuant to the Comprehensive Environmental Response, **Compensation and Liability Act (CERCLA)**, 42 U.S.C. § 9601 et seq., the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq., and the **Hazardous Waste** Management Act, Idaho Code § 39-4401, et seq.

2.2 The FFA/CO establishes requirements for: (a) identification and performance of interim **cleanup** actions, (b) performance of investigations to determine fully the nature and **extent of threats** to public health or welfare or the environment caused by releases of hazardous substances, (c) performance of studies to identify, evaluate and select cleanup **actions**, (d) implementation of selected cleanup **actions** and (e) compliance with federal and state hazardous waste laws.

2.3 The **INEEL** site is divided **into ten waste** area groups (WAGs). Each WAG contains several operable **units (OU)**. The operable **units** generally cover specific geographic areas at the site, but may cover specific **activities**.

2.4 The Record of Decision (ROD), dated October 1999, for OU 3-13, Group 1, established an interim action for contaminated soil surrounding underground storage tanks (Tank Farm Soil) at WAG 3, the Idaho Nuclear Technology and Engineering Center.

25 The permanent remedy for the Tank Farm Soil is currently under OU 3-14.

2.6 The ROD for OU 3-13, Group 1, required the installation and maintenance of institutional controls to prevent public exposure to the Tank Farm Soil and engineering controls to reduce water infiltrating the Tank Farm Soil. The engineering controls to reduce surface water infiltration included installation of a temporary cover over the tank farm area to divert precipitation, installation or improvement of diversion channels, installation of a lined evaporation pond, and other drainage improvements to minimize moisture infiltration and mobilization of contaminants.

2.7 A schedule for completion of the interim action activities was established in the RD/RA Work Plan. Pursuant to that schedule, activities were to be completed and a Remedial Action Report (RA Report) was due by not later than July 29, 2002.

2.8 DOE requested an extension by letter dated August 30, 2001, which was denied by letter dated September 6, 2001 (IDEQ), and September 19, 2001 (EPA).

2.9 During the week of January 28, 2002, EPA conducted an inspection of the Idaho National Environmental and Engineering Laboratory (INEEL).

2.10 Although DOE submitted an Interim RA Report on July 26, 2002, it did not demonstrate compliance with the requirements of the RD/RA Work Plan, and therefore, of the FFA/CO. The Interim RA Report described activities that were not completed pursuant to the requirements of the RD/RA Work Plan.

2.11 EPA issued a Notice of Violation and Penalty Assessment dated December 4, 2002, as described in Sections 1.1 and 1.2. DOE responded with a Statement of Dispute, dated December 20, 2002, elevating this matter to the Dispute Resolution Committee (DRC) under the FFA/CO Part IX. On January 13, 2003, EPA transmitted a Statement of Position in response to the DOE Statement of Dispute.

2.12 The DRC has resolved this dispute by this Agreement, which fulfills the requirement for a written decision signed by all Parties under paragraph 9.2(e) of the FFA/CO.

AGREEMENT

3. The parties hereby agree to the following terms and conditions to resolve the NOV and dispute. The enforceable milestones (i.e., deadlines) in the OU 3-13, Group 1 RD/RA Work Plan are superseded by this Agreement,

3.1 DOE will continue to pursue acceleration of tank cleaning and closures.

3.2 DOE shall complete the following Interim Action Milestones:

3.2.1 Complete and put into operation the following work outside the tank farm fence: lining ditches, culvert installation, and lining the evaporation pond. This work shall be completed, and DOE will provide a letter to the IDEQ and EPA certifying completion of this work, by the planned date of 9/30/03 with an enforceable milestone date of 12/31/03.

3.2.2 Place an infiltration barrier¹ over the affected areas of release sites CPP-28, CPP-31, and CPP-79 in the tank farm, and provide a letter to the IDEQ and EPA certifying completion of this work, by the enforceable milestone date of 9/30/04. The installation of the barrier is expected to reduce the infiltration of precipitation through the principal soil contamination areas by significantly more than 80%, meeting the intent of the interim action.

3.3 DOE shall complete, by 12/31/03, a revision of the data quality objectives (DQOs) as a modification to the existing RI/FS Work Plan for the OU 3-14 RI/FS. This work is intended to identify data gaps and evaluate the feasibility of accelerating the OU 3-14 ROD for the Tank Farm Soil.

3.3.1 DOE, EPA, and IDEQ agree to work collaboratively to expedite a phased implementation of the Tank Farm Soil permanent remedy. DOE, EPA, and IDEQ agree to refine the planned date for the OU 3-14 ROD after the DQOs are established. Until that date can be more accurately determined, DOE-ID agrees to a planned date of 12/31/06 for completion of the OU 3-14 ROD. The current enforceable deadline date for the draft ROD is May 2010. The sequencing of tank closures and the schedule for Tank Farm Soil remediation will be integrated to occur in stages.

3.3.2 If any party deems it infeasible to pursue an early permanent remedy as described in § 3.3.1 above, DOE will install an infiltration barrier over the remaining areas in the Tank Farm as the tanks are closed.

3.3.3 DOE will submit the draft Remedial Action Report that will include a draft Tank Farm Interim Action Operations & Maintenance (O&M) Plan, by the enforceable milestone date of 5/31/05 for that portion of work set forth in § 3.2.1 and § 3.2.2. If it is deemed infeasible to pursue an early permanent remedy under § 3.3.2 above, the O&M Plan will include a plan and schedule for installation of the infiltration barrier over the remaining

¹ The term "infiltration barrier" means any of the low permeable surfaces such as concrete, asphalt, HDPE, polyurea, or temporary enclosures that achieve the Remedial Action Objectives identified in the OU 3-13 ROD. Should changes in the type of low permeability barrier be contemplated from those identified in the Tank Farm Interim Action ROD/RA Work Plan and per the results of DOE's treatability study, DOE will propose revisions in accordance with the FFA/CO change process.

areas in the **Tank Farm** as the tanks are closed. **O&M** will be per the FFMCO.

3.4 DOE agrees to separate out the **non-Tank Farm** Soil components **from** the OU 3-14 RVFS (CPP-23, CPP-61, CPP-81, CPP-82) and prepare a draft **ESD** to the OU 3-13 ROD to address these components, to be submitted to the IDEQ and EPA by **the** enforceable milestone date of 12/31/03. In addition, DOE may, in **the** draft ESD, propose addressing newly identified **WAG 3** CERCLA sites. DOE may **also**, in the **draft** ESD, propose addressing the **WAG 3** final groundwater decision as part of OU-3-13. Agency review of the ESD shall be as specified in the FFMCO for a primary document and **nothing** herein shall be deemed **or** construed as a pre-approval of the **matters** proposed in the **ESD**.

3.5 Payment of Stipulated Penalty: DOE shall, **within** ninety (90) days of the effective date of **this** Agreement pay a stipulated penalty to **EPA** in the amount of One Hundred Seventy Five Thousand Dollars (\$175,000). **The** stipulated penalty payment **shall** identify **INEEL, site 10A9, and** shall be sent to the following **address** with a copy to the EPA Remedial Project Manager:

Mellon Bank
EPA Region-10
ATTN: Superfund Accounting
P. **O.Box** 360903M
Pittsburg, PA 15251


3.6 General Provisions

- 3.6.1** In **the** event **that** DOE fails to comply **with** any provision of **this** Agreement, EPA and **IDEQ** reserve the right to pursue any remedy available under the FFA/CO, including those remedies reserved under part **XXXI** of the FFA/CO.
- 3.6.2** **Only** the enforceable milestone **dates** expressly **so** established by **this** Agreement **are** enforceable dates. **All** other dates or schedules discussed in **this** Agreement, including planned dates, are not enforceable dates and shall not be subject to penalties.
- 3.6.3** The **four** enforceable milestone dates established by **this** Agreement are as follows:
- (a) 12/31/03 – per § 3.2.1 complete and put **into** operation the work outside **the tank farm** fence and provide **a** letter to **the IDEQ** and EPA certifying completion of **this** work
 - (b) 12/31/03 – per § 3.4 submit draft **ESD** to EPA and **IDEQ**
 - (c) 09/30/04 – per § 3.2.2 place infiltration barrier and provide **a** letter to the IDEQ and EPA certifying completion of **this** work

(d) **5/31/05** – per § 3.3.3 submit draft Remedial Action Report

- 3.6.4** The enforceable milestone dates set forth in this Agreement shall be subject to stipulated penalties in accordance with part XI of the FFA/CO. The parties agree that ~~this~~ Agreement resolves all disputed matters relating to the NOV and ~~this~~ dispute. EPA and ~~IDEQ~~ agree that they will not in the ~~future~~ compel compliance or ~~assess~~ stipulated penalties with respect to the previous deadlines ~~that~~ have been superseded **by this Agreement**.
- 3.6.5** **This Agreement only addresses the Tank Farm Soil Interim Action and the scope of the OU 3-14RI/FS as set forth in § 3.4, and shall not affect any other milestones or enforceable requirements under the FFA/CO.**
- 3.6.6** **No provisions of this Agreement shall be interpreted to require obligation or payment of funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341.**
- 3.6.7** **Nothing in this Agreement shall constitute an admission on the part of the parties, in whole or part, in any proceeding except in a proceeding to enforce this Agreement.**
- 3.6.8** **The effective date of this Agreement shall be the date on which it has been signed by all three signatories.**
- 3.6.9** **EPA, IDEQ and DOE individually certify that the signatories to this Agreement have the authority to bind their respective agencies to the requirements of this Agreement.**

IT IS SO AGREED:

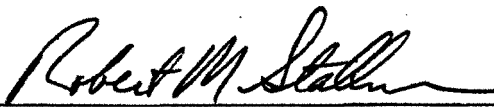
By: 
Michael Gearheard, Director
Office of Environmental Cleanup
Region 10
U.S. Environmental Protection Agency

Date: 20 Feb 2003

IT IS SO AGREED:

By: Orville Green Date: 2-21-03
Orville Green, Administrator
Waste Management and Remediation Division
Idaho Department of Environmental Quality

IT IS SO AGREED:

By: 

Date: 2-20-03

Robert M. Stallman
Acting Assistant Manager
Environmental Management
U.S. Department of Energy
Idaho Operations Office

